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Meeting of the Federal Open Market Committee

August 16, 1988

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, August 16, 1988, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman
Mr. Corrigan, Vice Chairman
Mr. Angell
Mr. Black
Mr. Forrestal
Mr. Heller¹
Mr. Hoskins
Mr. Johnson
Mr. LaWare
Mr. Parry
Ms. Seger

Messrs. Guffey, Keehn, Melzer, and Morris, Alternate
Members of the Federal Open Market Committee

Messrs. Boehne, Boykin, and Stern, Presidents of the
Federal Reserve Banks of Philadelphia, Dallas, and
Minneapolis, respectively

Mr. Kohn, Secretary and Economist
Mr. Bernard, Assistant Secretary
Mr. Bradfield, General Counsel
Mr. Patrikis, Deputy General Counsel
Mr. Prell, Economist
Mr. Truman, Economist

Messrs. Beebe, J. Davis, R. Davis, Lindsey,
Siegman, Simpson, and Ms. Tschinkel,
Associate Economists

Mr. Cross, Manager for Foreign Operations, System
Open Market Account

1. Entered the meeting following action to approve minutes for the
June 29-30, 1988, meeting.

Mr. Coyne, Assistant to the Board, Board of Governors
Mr. Ettin, Deputy Director, Division of Research and
Statistics, Board of Governors
Mr. Promisel, Senior Associate Director, Division of
International Finance, Board of Governors
Ms. Zickler, Assistant Director, Division of Research
and Statistics, Board of Governors
Mr. Keleher, Assistant to Governor Johnson, Office of
Board Members, Board of Governors
Mr. Wajid, Assistant to Governor Heller, Office of
Board Members, Board of Governors
Mr. Whitesell, Economist, Division of Monetary Affairs,
Board of Governors
Ms. Low, Open Market Secretariat Assistant, Division of
Monetary Affairs, Board of Governors

Messrs. Balbach, T. Davis, Lang, and Scheld, Senior
Vice Presidents, Federal Reserve Banks of
St. Louis, Kansas City, Philadelphia, and
Chicago, respectively

Ms. Lovett, Messrs. McNees, Miller, and O'Driscoll,
Vice Presidents, Federal Reserve Banks of
New York, Boston, Minneapolis, and Dallas,
respectively

Mr. Guentner, Manager, Open Market Operations,
Federal Reserve Bank of New York

Transcript of Federal Open Market Committee Meeting
of August 16, 1988

MR. CROSS. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Thank you. Are there any questions for Mr. Cross? If there are no questions, I would entertain a motion to ratify the actions taken since the last FOMC meeting.

MS. SEGER. So move it.

CHAIRMAN GREENSPAN. Second?

VICE CHAIRMAN CORRIGAN. Second.

CHAIRMAN GREENSPAN. Without objection. Joan Lovett, would you report on the--

VICE CHAIRMAN CORRIGAN. Could I, Mr. Chairman, just make a comment rather than raise a question? Sam Cross mentioned in the course of his remarks that he thought that intervention on the part of the major central banks in this intermeeting period had helped curtail, if you will, the rise of the dollar. I think that's a fair statement. I want to actually make a more general, albeit a brief statement, about intervention because I think it has gotten a bit of a bad name. It's not that I have any illusions about the ability of intervention to be decisive in terms of the position of a currency either short term or long term--but I do think there is a characteristic of the foreign exchange market, at least as I see it, that we have to keep in mind. And the characteristic is the equivalent of these very sophisticated and very aggressive forms of program trading in the foreign exchange markets whereby individual institutions and individual traders take very, very large positions. And they're willing to push those positions to the very limit. One of the things that those trading strategies do is reinforce, in my judgment, the tendency toward one-way markets--in a context in which the perception is that you can make a quick buck by pushing that as far as possible. And as long as those trading strategies are as dominant as I think they are, the dangers that can be associated with one-way markets become all the greater, and the tendencies for the exchange market to overshoot all the greater.

My point in those circumstances is this: I think that intervention does play a useful role in reaffirming the fact that there are two-way markets. And I think that in and of itself is of value even if one can not argue persuasively that a particular exchange rate could or should emerge from the process. But I do think that the presence of the central banks does create something of a conviction toward two-way markets. If there's any doubt about that, all you have to do is talk to traders. They will say that they tend to be much more cautious when they feel that the central banks may be on the scene. So, I do think that these trading strategies--and the way at least I think they manifest themselves in the market--provide to me a fairly convincing case that there is merit or wisdom in the central banks showing their hand from time-to-time in the market even if one is agnostic about the effects in terms of a particular exchange rate at a particular point in time.

CHAIRMAN GREENSPAN. When do you envisage--was it 1984, 1985, 1986--that this process would have changed? Because, obviously the evaluation of the Jurgensen Report, which endeavored to filter through all such relationships, was unable, at least to the best it could judge, to find any significant intervention impacts. Is this something that you're suggesting is--

VICE CHAIRMAN CORRIGAN. I think the character of the market has changed in the last several years. All you have to do, in one sense, is just look at the sheer volume of transactions. If you use CHIPS transactions as a proxy--an imperfect proxy, but one which still is a pretty good way to do it because our survey suggests that something like 90 percent of the CHIPS traffic is foreign exchange transactions--they're up. And if you look at what has happened in the development of the derivative markets in foreign exchange, perhaps especially the options [market], it's very clear that the sheer size of the market and the amount of turnover has grown enormously. Look at the profits that all the major banks and investment banks are generating quarterly from foreign exchange trading. I still can't fully understand that myself. But every single quarter, with an exception here or there, all of these major firms are generating very sizable profits from foreign exchange trading. If you look at some of the individual trading strategies, at least in some cases, they are a very elaborate form of program trading applied in a different area.

I think all of those things taken together do constitute a change--admittedly over time--but a change in the character, the structure, the fabric of the market. And I wouldn't argue with any conviction that the totality of those things is decisive, in any sense of the word, in producing these tendencies to overshoot that we see in the markets. But I do think that they can be tempered a bit. Indeed, as I said, the foreign exchange traders say they behave differently when they sense the central banks are on the scene. Again, I'm not trying to make an argument that necessarily would dispute any of these earlier reports--finding point estimates and being able to say that this pattern of central bank intervention produced this result. I'm agnostic myself about that.

CHAIRMAN GREENSPAN. But at some point, the type of hypothesis you're raising is testable.

VICE CHAIRMAN CORRIGAN. It should be.

MR. TRUMAN. Mr. Chairman, in the Jurgensen report, it's fair to say that group did not really examine closely, in a statistical sense, the effectiveness of intervention in the framework that President Corrigan is putting forward. In fact, it concluded that in the very short run there was some case for the effectiveness of intervention, and that I think is close to what President Corrigan has said is a testable proposition. That's about all you can say. Translating that in terms of the early 1980s, and the notion that some central banks then had--and even now have--a practice of being in the market in order to constantly provide a sense of two-way risk [unintelligible]. The Bank of Canada, for example, follows a strategy of that type. And from time-to-time the Bank of England has done it, although not recently. And that was recognized as one motivation for intervention that was different from a motivation designed to alter the medium-term course of exchange rates. And I think President

Corrigan is now commenting on the merits--saying that in some situations, there might be a case for intervention, even recognizing that in terms of altering the medium-term course of exchange rates, a sterilized intervention is likely to be singularly ineffective.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. Mr. Truman said part of what I wanted to say, but I think there's an important distinction between the types of intervention. The kind that just dribbles \$50 million in every day, which seems to me at least to have virtually zero effect, is the kind of intervention that shows up in the Jurgensen Report as having very little effect. On the other hand, if you're hitting a one-way market with a certain relatively large intervention, then you really get the market impact that you're talking about. But I think what you've got to ask is whether by doing that you're also creating uncertainty. I think you are. And by creating the uncertainty you're reducing the incentive to take positions, because they're built on the one-way certainty. Then you've got to ask yourself the broader question of whether a central bank is contributing to increasing or decreasing the uncertainty. Clearly, we like to think that we are moving the market towards the ultimate equilibrium, thereby somehow or other reducing fluctuations. But I think that is really tough to substantiate econometrically because you're dealing by necessity with small samples and periods that are very difficult to compare.

MR. JOHNSON. What is the average in terms of dollar transactions per day?

MR. CROSS. The average in terms of what?

MR. JOHNSON. Dollar transactions per day?

MR. CROSS. The United States or worldwide?

MR. JOHNSON. Well, worldwide.

MR. CROSS. We don't really know.

MR. JOHNSON. You don't know?

MR. CROSS. We know what we do and they know what they do.

MR. JOHNSON. I think [theirs is] very large relative to what [we] do.

MR. BLACK. Very large.

MR. CROSS. On the part of the United States--. Sorry to give you numbers, but worldwide it's probably equal to at least \$300 or \$400 billion a day.

MR. HELLER. Yes, but, Sam, that is not the relevant number for intervention purposes. What is relevant, I think, is the size of the open position in the market.

MR. CROSS. Well, that we don't really know.

MR. HELLER. And clearly no one knows, but that's what you're trying to do.

MR. CROSS. When we are intervening we are trying to bring about a certain influence. And certainly, the market is constantly and intensely out there watching to see what signs we--and by that I mean the central banks collectively--are giving. They are very much concerned about whether there is evidence that the central banks are going to [intervene]. The central banks can hurt them when they choose to come into the market. And they certainly pay great attention to that in all cases. And they can, on occasion, keep some of these movements from moving in one direction or another and kind of getting--

MR. ANGELL. Well, I'm not a purist on intervention. I think there are times when that certainly is constructive. But I would believe that to intervene all the time is a good way of demonstrating that you have very little power and, thereby, you are not affecting in any way this perception of a two-way risk. It seems to me that if central banks are willing to alter the basic scarcity of their currency they can do a great deal to influence its exchange value. And if intervention is trying to coincide with central banks' willingness to do that, it can indeed give a perception of a two-way risk. I find it particularly dissatisfying to have intervention to the level and the extent that we have done during this intermeeting period while at the same time we clearly wanted to decrease the scarcity of dollars in world markets. I see no point whatsoever in demonstrating that we were unsuccessful. They might find it out anyway without our so clearly making it evident.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. I wasn't going to comment because I think my position on this is fairly well known. But Jerry has raised the issue in the context, I guess, of orderly markets. I'm not sure what a one-way market is other than the fact that people are bidding the price up or down on a particular instrument. And I don't see this instrument as much different than any others. We trust the markets to do pricing in general, so then I don't see why we have a particular problem with allowing markets to price currencies. If it's an orderly markets argument, then it seems to me that we should come in when markets are presumed to be disorderly; and that means not very frequently. If we are in all the time, then it defeats the purpose, it seems to me, of the orderly markets argument. I'm not in favor of the orderly markets argument either. I think there may be points in time when we would want to intervene in situations where there's a panic or crash. Other than that I just don't see what we gain by it, other than getting a wider spread between bid and ask. It seems that we are adding uncertainty to the market unnecessarily.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I have sort of a technical question. I'm not a purist on intervention either, although I think there are times when the signal is useful and there are times that it's useful for reasons of international cooperation, even regardless of the substance--

CHAIRMAN GREENSPAN. I would agree with that.

MR. JOHNSON. But the one thing I have been worried about recently is--this is a question I guess for Joan Lovett and Don Kohn and Sam Cross--when we are doing consistent interventions and it's working in the other direction from our open market operations, it does run the risk I think of confusing the federal funds market as to what our reserve needs may be. If we have a larger drain need--say it appeared when we are tightening--if the market is not aware of our intervention actions to sell dollars, they may not know specifically or may considerably underestimate the draining requirements of the Open Market Desk. And that can lead to some strange behavior in the funds market, it seems to me. How do we deal with that? It seems to me that we don't want that kind of uncertainty in the funds market. Maybe we want the two-way risk on the foreign exchange market, but we don't want this uncertainty in the open market operations.

MS. LOVETT. That hasn't been a factor during this most recent period, in part because so many people in the market are trying to put together estimates about how reserves are going to behave--very much the same way we are. Data on reserves are released with a lag, but it's a relatively brief lag, so people are able to speculate as to what factors are influencing reserve behavior. That brief lag may cause people to wonder momentarily in a transition period about the impact on the funds rate. But I think over just a relatively short length of time they've been able to perceive that. For example, in the recent period, people have been watching the Federal Reserve's balance sheet and have seen a rise in other assets and have concluded from that rise that while there are many components in it, the foreign exchange component has probably been a fairly large one; and therefore, our needs to add reserves going forward would be smaller than they had thought heretofore. So it seems as though it has worked out in this past period. Any sort of disturbance on the funds market has been fairly brief.

MR. KOHN. I agree with what Joan said--there can be no more than a 7-day lag before they get our balance sheet. I would just add that I think the only time that it was--

MR. JOHNSON. Seven days, though, can be important.

MR. KOHN. But most of the time those transactions are quite small, particularly taking account of what's done for our own account. It really is lost in the noise relative to the Treasury balance, float, and all those other things.

MR. JOHNSON. But truly that's just as big.

MR. KOHN. There was one period here, in which we did the off-market transactions with that had a much larger effect and caused us, I think, to have a slightly different view of our own reserve needs than the market did. But that wasn't the usual kind of intervention.

MS. LOVETT. I think it was only temporary.

MR. KOHN. And that only lasted three days in terms of--

MS. LOVETT. One other part of that--whenever there is central bank intervention, the financial markets have been quite

sensitive to listen to that. Each morning one hears what the rumors are as to whether central banks are in or not in, so that when they take a look at what they think might be affecting reserves, that would be one thing they tuck in the back of their minds to some degree.

MR. CROSS. Most of our intervention has been done in a way which was designed to be noticed, because that was part of the purpose. And I have been impressed with the extent to which the people who watch these things closely have a pretty good fix on the amounts being done, and they know the purposes.

MR. JOHNSON. A good example, though, is this yen transaction that we are doing, which is not constructed to be noticed I think.

MR. CROSS. That's right.

MR. JOHNSON. And that's reported with a 7-day lag?

MR. KOHN. It's not reported per se, but it's in 'Other Assets'.

MR. JOHNSON. Okay.

MR. CROSS. It gets in the balance sheets and we will announce it. I give a quarterly report in September, and in that we will indicate that we have purchased these currencies. We will not be specific about the source--the counterpart--but we will indicate publicly that we have picked up these currencies.

CHAIRMAN GREENSPAN. Unless there are any further questions on this issue, I would like to move forward to domestic operations. Joan Lovett.

MS. LOVETT. Thank you, Mr. Chairman. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Any questions for Ms. Lovett?

MR. HELLER. Did you say bond markets were down 3/4?

MS. LOVETT. Initially this morning, when the trade numbers first came out, the long bond was down about a point. It seemed that for a brief juncture it would be holding, and I don't know whether it changed further since.

MR. KOHN. I think right before we came in, it had come back a little bit from the low point. So it was probably down about 1/2 point or less.

CHAIRMAN GREENSPAN. What is the trade number?

SPEAKER(?). \$12.5 billion.

MR. BLACK. Was there any revision to the number for the previous month?

SPEAKER(?). Yes.

MR. TRUMAN. I will cover that in the next--

CHAIRMAN GREENSPAN. Lee.

MR. HOSKINS. I have one question. Are you perceived in the markets as changing the way that you signal market participants as to where you want reserves or where you want the funds rate? Are you making a distinction between customer and System operations that is different? It seems to me, as I observe it in the newspapers anyway, that we are trying to signal more directly where we are with respect to funds.

MS. LOVETT. Well, I think, during part of the period there was an effort to let the market know that if expectations had carried the rate beyond what the Committee had voted, that seemed to be a way of letting them know that. The reason, of course, was that these expectations could become embedded; and we were trying to signal that they were really moving faster than the Committee had instructed. The longer those things persist, the more people begin to feel that--if these expectations really get imbedded in the structure of rates--when the Committee meets again, we may have taken the decisions from it. So we felt it necessary to give a signal when rates seemed to be ratcheting higher. That was particularly true when funds seemed to be getting sticky at the 7/8ths level.

MR. HOSKINS. That kind of gets to the heart of whether we are focusing on borrowings or the funds rate and all that.

MS. LOVETT. Right. Well, we got the borrowings.

MR. KOHN. President Hoskins, I will be discussing that briefly in my briefing as well.

CHAIRMAN GREENSPAN. Any further questions for Ms. Lovett? If not, may I have a motion to ratify the Desk's operations since the last meeting?

MR. JOHNSON. I'll move.

MS. SEGER. Second.

CHAIRMAN GREENSPAN. Without objection. We will now go to our economic staff reports, and we will have Messrs. Prell and Truman sequentially.

MR. PRELL. Thank you, Mr. Chairman. Ted will be following me with some comments on this morning's trade data as well as some remarks on the implications of recent foreign exchange market developments.

[Statement by Mr. Prell--see Appendix.]

[Statement by Mr. Truman--see Appendix.]

CHAIRMAN GREENSPAN. Thank you. Questions for either gentleman?

MR. PARRY. Ted, I have a question about your net export number. With this small decline in the value of the dollar that you're assuming, wouldn't a model forecast typically give less of an improvement in net exports than what you're showing? It seems to me that for this year it's something like \$47 billion, and for the next year it's \$32 billion. At least some of the models I've seen would suggest that with that kind of very small decline in the value of the dollar you would have a more significant slowing in the improvement in net exports than you have. Was that managed to some extent or--

MR. TRUMAN. Well yes, I think to some extent it was because, as I mentioned, we were encouraged by what we had seen in the first half of this year. So, given that, along with other anecdotes and so forth and so on, we have carried a bit more of that through to the second half of the year. And, in effect, that attenuates some of the effect of the dollar alone on the forecast. So we scaled it back a little bit on the basis of an assessment of what the appreciation to date has achieved for us, or how much it's going to achieve for us.

MR. PARRY. So at least that's one area where perhaps it could turn out that there'd be a little less pressure in terms of growth?

MR. TRUMAN. That's right.

MR. PARRY. Okay, thank you sir.

MR. TRUMAN. It could also be a little more. I must say you try to put it down and--

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I was just going to ask Ted: Have you redone your projections of net exports since you got the Census merchandise trade figures?

MR. TRUMAN. Essentially, they are very close, [even] with the revision. Although the June number is "bad", the May revision was quite large and in fact if anything, the two together were a little better than we expected in our forecast. They were a little worse than what was implicit in the GNP numbers. But it translates to something like maybe a 10th or two at an annual rate on the second-quarter real GNP. So that's not going to change anything. And both components pretty much matched up with what we suspected.

MR. BLACK. This figure for net exports for, say, the fourth quarter of 1989 would not be very far off from \$47.2 billion then?

MR. TRUMAN. Yes. The number would be exact. I think that number, if I may put it that way, had less impact on us than normal. I wouldn't--

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Mr. Chairman, I want to compliment the staff for giving us these drought-adjusted GNP projections because I think these really give us a more realistic appraisal of the pressure on resources that we are likely to see during the rest of the year than

the ordinary GNP numbers. The decline from the drought is hardly a usual source of decline in the GNP because it doesn't generate any resources that you can shift into other uses in the economy. So, if you look at drought-adjusted growth rates for this past quarter and the next two quarters, you get 3.6 percent for the second quarter--a number I got from my staff--3.8 percent in the third quarter, and 2.8 percent in the fourth. And I must say that this adds up to two full years now of running the economy substantially in excess of our long-term growth potential. We have a real barn burner of an economy on our hands. That's the only thing I can see.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I wanted to ask Mike a question. What percentage of the GNP growth rate is investment demand considered to be in terms of the components of the growth rate? Is that a big factor?

MR. PRELL. If we look at the next couple of quarters, real BFI accounts for a third of the GNP growth in the third and the fourth quarters. Over the course of next year, it accounts for about 20 percent of the growth.

MR. JOHNSON. It's pretty significant.

MR. PRELL. It's clearly a key dynamic income-generated sector in this forecast.

CHAIRMAN GREENSPAN. If you add in the inventories that go with that as one of the long production cycle, you're getting nine months of consolidated inventory in front of the expenditure outlook. I suspect the numbers would be a significant increment over that.

MR. PRELL. As I noted, we now are looking for inventories, at least over the second half of this year, to be positively contributing to GNP growth. And we are looking for it to be significantly in the manufacturing area, related in part to this durable goods strength in business equipment in particular.

MR. JOHNSON. How big of a factor is PDE in that?

MR. PRELL. It's the bulk of it--if not more than that if we are right in our forecast of negative nonresidential structures over the second half and essentially flat next year. So the whole story is producers durable equipment. And a large part of that story is our reading of the current trend in the computer and office equipment area, which has been growing very rapidly. While we had it tailing off noticeably over the forecast period, it remains a strong element in the forecast.

MR. JOHNSON. The reason I'm asking is because I was struck by the presentation to the Board yesterday and talking with Charlie Schultz earlier who made a comment I thought was kind of interesting. He said that a lot of that PDE growth--correct me if I'm wrong--is the deflator. The decline in prices for producers durable equipment is generating a lot of the real output side of that. If you apply a fixed-weight deflator to PDE, I don't know that you get a totally different result, but what does it do?

MR. PRELL. I think that would overstate the contribution that makes. The PDE deflator is declining--

CHAIRMAN GREENSPAN. It's not the PDE deflator; it's the computer component.

MR. JOHNSON. Computers.

MR. PRELL. Indeed, but looking at the total PDE number--

MR. JOHNSON. I was noticing yesterday it was down about 3 percent, or 2-1/2 percent.

MR. PRELL. The total PDE deflator is declining at something over 2 percent a year in this forecast. Given that we have PDE rising at 14 percent this year and 6 percent next year, it isn't the whole story by any means.

MR. JOHNSON. It's not the whole show. Well, say you apply the fixed-weight deflator though, how much would that take out of the growth in PDE?

MR. PRELL. It's not so much I think the fixed-weight as the question of whether you want to really deflate those computer expenditures at that rate.

MR. JOHNSON. Okay that, then.

MR. PRELL. I don't--

MR. JOHNSON. I'm not suggesting we should, but I'm saying I think that's a relevant measure. But--

MR. PARRY. But if you didn't take that into account, it would be very misleading.

CHAIRMAN GREENSPAN. But I think the issue is--

MR. PRELL. I think the other thing to consider is that, in a sense, your potential and actual growth would be lowered by the same token. Your measured real growth would be slower and your potential real growth would be slower, but resource utilization quotations in the short run wouldn't be materially different. So, I think we are getting distortions of some of the numbers, in effect, by this base-to-base year against which we are measuring PDE prices--computer prices in particular. But I think the real crux of the matter is that no matter how you slice it, we are at levels of resource utilization much higher than they had been or than we had expected. That's what's really driving our inflation forecast.

MR. JOHNSON. Okay. But you're suggesting, though, that the potential number changes with the way you look at the deflator?

MR. PRELL. Well, if you were to assert that GNP growth has been overstated by the use of these 1982 price deflators, then presumably potential GNP growth is also being commensurately overstated. So it doesn't give you any more room to maneuver. I think it's important to have some handle on what's happening with the

capital stock for one's assessment of productive potential. But that's a much longer-horizon issue. This is sort of like those other questions relating to the possible mismeasurement of output whether it's [unintelligible] or anything else that affects both actual and potential output [unintelligible]. And it doesn't do much for the gap.

MR. PARRY. Isn't the analytical issue raised here that you may be overstating inflation a little bit--that there has actually been more real growth because of declining prices, which has not been taken account of in the fixed-weight index. It seems to me that may be a bigger analytical issue in this area.

MR. PRELL. Well, this gets into very complicated, almost metaphysical, issues. I'm not sure that there really is a problem in the sense of overestimating.

MR. JOHNSON. But you can't look at the fixed-weight on one side only. It seems to me that you've got to be consistent. And like you say, if you believe the deflator issue is important on the growth side, then you should be looking at the implicit deflator otherwise--

MR. PRELL. I'm not sure; it depends on the question.

CHAIRMAN GREENSPAN. Well, I think this question--

MR. JOHNSON. Well, it's almost an apples and oranges problem, though.

CHAIRMAN GREENSPAN. Now we are about to get into the discussion of what is the definition of a unit of economic output. And that's going to go on for six weeks!

MR. JOHNSON. Yes. Okay, I will stop.

CHAIRMAN GREENSPAN. I'd appreciate that. I think they're horrible. We had a running debate at the Board meetings on this subject--on the effect of the shifting base of the price index in the GNP--which probably at this stage fills up about six looseleaf books of about 1,000 pages.

MR. JOHNSON. That's right. It doesn't change the overall story, but it does around the margin. That's okay.

CHAIRMAN GREENSPAN. Change the structure. President Melzer.

MR. MELZER. Mike, I wondered on the personal consumption expenditures, does the greater amount of floating rate debt--home equity loans as well as ARMs--in this cycle have a significant impact there?

MR. PRELL. We've thought about that. I must say the amount of quantitative work we have done to date on this is not as much as I think we want to do over time. It's hard to get a fix on the household portfolio. Our assessment is that probably the amount of what I might call rate-sensitive assets does not exceed the amount of rate-sensitive liabilities in quite the same proportion as it previously did. But, on balance, an increase in interest rates tends

to augment household cash flow. We don't think the changes that have occurred really would make a big difference in the responses of the household sector in the short run. But it is a new ball game to some extent, and there are distributional questions that we don't have a real good fix on. So I think it's something worth giving further thought and investigation to. But our basic assessment is that it doesn't make a big difference.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. I was intrigued by your comments about inflation and what might be necessary to get it moving in the downward direction. In fact, your forecast does have it moving down and I think you have the peak in the fourth quarter. I guess that prompts the question: What kind of tightening do you have in mind in terms of interest rates?

MR. PRELL. Well, there're two things I should say. One, the quarterly pattern between now and the end of next year reflects in significant measure the quarterly pattern of food price increases, which are strong until next spring and then are tailing off toward the end of the year. The second thing is that it reflects the particular pattern of oil prices and energy prices that we have assumed in this forecast. And that is an element that contributes to inflation in the first part of next year, after having been essentially flat in the second half of this year. So the bulge there is somewhat misleading. More fundamentally, we think the trend is one of acceleration at least through much of next year, and then tending into 1990 with an ever so slight upward tilt to compensation and underlying price trends. We assume that interest rates will continue to move up over the next couple of quarters and we essentially have that 9-1/2 percent area funds rate being reached by early next spring.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I was wondering whether Ted Truman could say a few more words about the economic, and particularly the monetary policy, assumptions that he has underlying the dollar forecast in other countries, especially Japan and Germany?

MR. TRUMAN. For the monetary policy side, we have interest rates abroad rising at about half the amount that they do here over the forecast period.

MR. HELLER. What they will do in the future or they--

MR. TRUMAN. Yes, that's right. So, that may be between 1/2 and 3/4 of a percentage point on short-term rates abroad over the forecast period. On the fiscal policy side, we don't have anything built in of a particularly stimulative nature in any of those countries. As you know, there's a slight expectation that fiscal policy in Germany will be coming in tighter in this forecast horizon.

MR. HELLER. Thanks.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. Mike, could you elaborate a little bit more on the interest rate outlook pattern? I know you mentioned fed funds are expected to reach 9-1/2 percent by next spring, and I think you said long-term Treasury bonds, 10-1/2 percent. It's hard to hear this morning at this end of the table, but I think you said 10-1/2 percent by next spring. Are you suggesting that this will be the peaking of rates for this cycle or that this is just sort of a run?

MR. PRELL. Again, I express that we recognize the uncertainty about these things and wouldn't want to be excessively precise in our characterization of what is involved in this forecast. But basically, we have the rates getting up to that level by the second quarter of next year and staying there.

MS. SEGER. How about mortgage rates? I noticed in your commentary you indicated that you think housing is probably number one on the hit list, as we tighten further. But when I went through and looked at some of the forecast numbers I didn't see really major downward revisions. So, maybe you can tell me what kind of mortgage--

MR. PRELL. We've made only a modest downward revision in housing starts as we get out into 1989 some ways. We've made some upward adjustment in the mortgage rate forecast. Mortgage rates have been running a bit tighter to the Treasuries than they had previously. We have mortgage rates getting up towards 12 percent in the second half and very possibly around 12 percent.

MS. SEGER. 12 percent.

CHAIRMAN GREENSPAN. Are there any further questions for either gentleman? If not, we are ready to do our round robin. Who would like to start off?

MR. BOYKIN. Well, Mr. Chairman, I'll start with the Eleventh District and get the less-than-good news out of the way early. I would say that the perception of what's happening in the Texas economy, and the Eleventh District generally, is improving somewhat. I think we are beginning to see some evidence showing through in the statistics. We did have growth in our District in the last half of last year that had kind of plateaued or stalled out during the first half of this year. But now we do think that we are seeing some renewed or resumed growth in the District and this is reflected in the employment numbers and that is primarily centered in Texas.

Those categories where we are not seeing much improvement, of course, remain in the construction side of it, finance, and insurance. We do have our real estate remaining weak. We've had fairly good rains in our District, although somewhat spotty, but the feeling is that the rains have ameliorated the drought effects. The information that we are getting from our bankers around the District is that they don't see a major threat to timely repayment of agricultural loans in the District.

We are somewhat nervous, I guess, about oil prices. If we do get a decline there, that obviously will be a negative. However, there has been so much adjustment to lower oil prices that it would not have the same effect as earlier declines had. Given the fact that our economy seems to be so much more closely linked to the national

economy, and given the fairly good forecast for the national economy, we feel that that will continue to be a pull for us and will be positive.

Attitudinally, as far as the financial situation is concerned, I think there is a great deal of relief with the approach to the resolution of the First Republic situation, and that has received very good press, has been very well received. Now the remaining speculation is whether the last big one will have to have some kind of relief.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, economic activity in our District continues to show I think very, very considerable strength. That's particularly true in the manufacturing sector, and more specifically in those activities that are either related to exports or capital goods where those operating levels continue to be very, very high. The steel industry, for example, is continuing to run at quite close to capacity. The third quarter is normally a period in which the steel industry shuts down a bit to deal with maintenance, but this year the maintenance is being deferred to deal with continuing demand. Chemicals and paper are continuing to run at high levels. Auto production schedules for the third quarter are considerably higher than in the third quarter of last year. So, I do think on the capital expenditures side, Mike has certainly covered it very well. I think we are going to see higher increases in capital expenditures than we may have forecast. And I'm sensing from a lot of companies that they really are thinking about adding significantly to their expenditure level.

I have just a couple of comments on the agricultural situation, other than crop estimates, which you've seen. First, implements: Interestingly, as we got started on this drought thing, it did not show up in implement sales. Through June they were holding pretty well; but the July numbers are now in and, on a comparative basis, July sales of tractors and combines, for example, are considerably under last year. That's not surprising, but certainly this is a negative feature. Agricultural banks, a second element of agriculture comments: We surveyed the agricultural banks in our District again last week, and the story I think continues to be more positive than one had expected it to be. The weak producers were weeded out in the previous adjustment. Those credits now on the books are farmers who are strong enough that they can deal with this drought without a renewal of significant problems among the banks.

To me, the most surprising shift that I've sensed over the last month or two is this employment thing. There has been, I think, quite a modification in attitudes out there. There is now, I think, quite persistently a shortage of [unintelligible]. The manufacturers I have talked to are running at very high levels, and their constraint really is the availability of labor to deal with it. And that's also the case I think in the service sector. I was talking to somebody the other day that has opened two major retail stores in Chicago. They put out applications, or requests for applications, and they were flooded with people. But they have high standards for their employment, and the applicants came in short on that. Therefore, they have opened one of their stores very significantly undermanned. As I

talk to people, it seems that the shortage of labor really is beginning to be felt. There are a couple of key contracts for which negotiations have just started. And I think people have been following that very closely. My sense of all this is that the wage side and the inflation picture are going to continue to accelerate. We are going to continue to see increases in wage costs.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Thank you, Mr. Chairman. The Twelfth District economy continues to grow at a healthy pace, with particular strength in the coastal states, excluding Alaska. This growth appears to be putting upward pressure on wages. For example, in southern California, Oregon and Washington, employers are having difficulty hiring qualified workers at prevailing wages. I also might say parenthetically that in California the minimum wage rose to \$4.25 effective July 1st. Inventories are satisfactory to lean throughout the District at both the manufacturer and retail levels. In some industries, including paper and aluminum, low inventory levels result from strong demand combined with limited production capacity. When we checked with District retailers, they indicated that the previously excessive inventories in women's apparel, which were quite a problem a couple of months ago, have been brought under control.

If I may turn briefly to the national economy: Even with the drought, real growth is likely to exceed the growth of potential output during the second half of this year. And next year we expect growth similar to that in the Greenbook, assuming further significant tightening of monetary policy between now and mid-1989. We do have a somewhat stronger dollar and a smaller improvement in net exports, but in our forecast this is offset by stronger consumption than that which is incorporated in the Greenbook. With the economy continuing to grow above or at potential over the forecast period, inflation in 1989--measured by the fixed-weight deflator--seems certain to accelerate by the roughly 1/2 percent that is in our forecast and the Greenbook's.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Well, Mr. Chairman, I'm going to tell a little different story today than I usually do. In fact, since I've been sitting on this Committee I have not had an opportunity to report lower economic activity in the Sixth District at any time. But I'm going to make that kind of a report today because activity in the Sixth District, with the exception of Florida, is slower than in the nation. I think this is partly a reflection of strength elsewhere. Of course, Louisiana and Mississippi have been in the doldrums for some time, but now Georgia is beginning to experience slower growth than the rest of the country, basically because of less immigration than in the past.

Having said that, several of the region's manufacturing industries are quite strong. Paper and pulp products, for example, ship building, and petrochemical plants are starting modernization and expansion projects, basically in response to pressure on capacity. They also report higher prices for materials.

I've talked to a lot of business people and really pressed very hard since the last meeting on the wage question. And I don't

think I'm really much more ahead than I was the last time in the sense that, while there is this anticipation of higher wages and a fear that it's going to happen, I'm not hearing that it actually has taken place. Some of the people that I've talked to are in fact labor union people, and in the organized labor sector I don't get any report, at least in our area, of any pressure for wage increases of any kind. They report to me that job security is basically the major concern of workers at the present time.

However, I would also report what Si Keehn mentioned that there does seem to be a shortage of labor, particularly in the service area. And a number of firms that I've talked to are having difficulty getting entry level people even though they're paying above the minimum wage. Of course, in Louisiana the unemployment rate is the highest in the nation and so the expansion that we have in some industries like chemicals is taking place in a very soft market for labor. In addition to this, we've had substantial layoffs and will continue to have substantial layoffs at Lockheed, where the work force is estimated to fall from 20,000 to 12,000 over the next 12 months--a very, very substantial layoff. And that's occurring right now. We are also getting cutbacks in the automobile plants, and TVA is cutting back in Alabama as well as in Tennessee and that's supplying labor to the region. We also have a fraction of Eastern Airlines cutting--, a relatively small impact, but a negative one nonetheless.

Nonresidential construction in our region is stronger than the rest of the nation; it's up about 4 percent, which perhaps is a little surprising. I am a little concerned about the projects that are on the drawing boards, particularly in the city of Atlanta. I'm concerned that the volume of new office space is not going to be absorbed very soon.

We have fortunately had some rainfall. It has been very spotty, but I think it has provided enough moisture to salvage the soybean crop, at least for the time being. So we are doing a little better there.

Looking at the national economy, we have no basic differences with the Greenbook forecast. There's a slight difference perhaps in unemployment, which we don't expect to rise quite as much, and our inflation forecast would be marginally higher. I think, however we look at it, we are looking at a very strong economy. And I don't see that that is going to abate any time soon, and that obviously has implications for policy.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. Anecdotal information that I've picked up in some recent calls would tend to confirm what's in the Greenbook. For example, I would describe retailers as guardedly optimistic. August got off to a good start in the first week and then was somewhat slow in the second week, but I think that was felt to be largely weather-related. In general, I think retailers feel that they've got their inventories in pretty good shape. They don't feel terribly exposed and they are guardedly optimistic about the prospects here.

On the manufacturing side, you pick up the sense of strength still in capital goods orders--backlogs, and so forth. The commentary

on the raw material price increases over the last year or so is that there's still some evidence of difficulty in passing all of that along. In the District itself, our numbers for the most recent quarter, which would be the second quarter, reflect what Bob Forrestal has described. Some employment declines show up in construction, textiles and apparel, food processing, and the like. But in general, we have paralleled the rest of the country. I don't attribute too much to this weakness. I think it has to do, as Bob said a while ago, with the fact that there's strength elsewhere as opposed to signs of imminent weakness in our District.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. The District economy continues to operate at very high levels, with increasingly tight labor markets. The only part of the District where I'm hearing complaints about the pressures on wages is from the Jersey shore; and that's largely, I think, from the Second District's garbage floating down there.

VICE CHAIRMAN CORRIGAN. We've got a lot of that.

MR. BOEHNE. As I say, there's nothing new. As far as the nation--I think it has been said a variety of ways--but the bottom line is that we are in a territory of accelerating inflation and we have to resist that growth. The only questions are timing and magnitude. As far as the components of risk, I agree that the risks are on the upside on capital spending. But we may get more restraint on consumption this time around than we have in the past, largely I think because of the increase in variable interest rates on consumer-type loans, both home equity loans and also variable-rate mortgages. If people have to spend an extra \$50 or \$100 a month on mortgage payments, that gets right into consumption fairly quickly. I think the shorter lags on consumption really are what we want because, as you look at the profile of the expansion, we are getting personal consumption growing 2-1/2 percent and what we really would like to do is get it down in the 1 to 1-1/2 percent range to be able to bring about the shift toward the external sectors. So I think that we really do need to watch this consumption. We may find that we'll get quicker restraint from monetary policy tightening than we have in the past.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. The story in the District hasn't changed much. There is still strength across the board in the manufacturing sector, so I won't bore you with the details of that. What we've focused on, and what many of you have focused on, is what's happening in labor markets. We have two areas where we have some shortages occurring right now. One happens to be in the service areas, at entry level positions. It's particularly bad in the Columbus area, which has had a very strong economy. The second area is in the more skilled positions in manufacturing, and that's across the board in a number of different cities where capital projects are underway. So, we are experiencing some labor shortages right now. A major bank in the Columbus area is talking about total compensation increases in the neighborhood of 5-1/2 to 6-1/2 percent--I can't define it any better than that--because of the difficulties of getting people on board in that market and the rising wage rates at the entry level.

In terms of retail activity, the Pittsburgh market has a 15 to 20 percent hike in wages for entry level people because a major retailer there is in the market trying to hire 1,200 people. In terms of sales,

They've noticed a significant increase in what she would call back-to-school buying. They would have expected about a 10 percent gain and what they're getting is something on the order of 25 percent. Now that is firm specific, so there could be some things that have gone on within the firm generating that. The only sign of weakness that I could find happens to be in a little stainless and steel strip indicator that I follow. It's an index of new orders put out by one firm, and that's dropped significantly in the month of July. What this seems to mean is that we haven't seen any signs of real weakness. We don't have a boom; but we have continuing strength across the board and some tightening up in labor markets.

As we look at the national picture, we don't see it much differently than the staff, a little higher on the inflation side. I think we have a little more in terms of the labor compensation built in than they do, but not a lot. I think the risks are clear, probably not worth stating, but I'll do it anyway. They're obviously on the inflation side at this point. I don't think we've seen sufficient signs that our policies have impacted the economy. Maybe there's a lag that we haven't seen yet--that they will begin to impact. But I think we ought to gear our policy more towards the risk of inflation.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I share Frank Morris's appreciation of the staff's efforts to give us some drought-adjusted figures for the GNP for the projection period. Obviously, that drought has been a severe blow to a lot of parts of the country, but there's really nothing that monetary policy can do in the short run to deal with that. So, I think we need to focus on these drought-adjusted figures in trying to plan the course of monetary policy. These figures show GNP, after a bulge in this quarter, working down on a drought-adjusted basis to around 2 percent in the early part of next year. That seems to me--in light of the tightness in labor markets and the higher levels of capacity in a lot of key industries--to be about as fast as we would want GNP to grow at this stage.

I'm not quite as optimistic as Ed Boehne was--and I gather, probably Martha--that on the basis of these variable rates on consumer loans, consumption will slow down as much as the staff has guessed. They've got 1.3 percent throughout each quarter of 1989. If I had to guess, I would think it's probably going to run higher than that--although that would certainly be a desirable rate, in view of the necessity of getting that down to the point that we can accommodate an improvement in our balance of payments.

What really bothers me most, I think, is what bothers most of the others: that despite all this tightening that we have done up until now, and the staff's projection of considerably more tightening beyond this, we've still got pretty big increases in inflation projected. For example, the CPI less food and energy is rising at over a 5 percent rate at the end of next year, and much the same sort of thing is true for the fixed-weight GNP deflator, which is close to

4-1/2 percent. These may be too high, I don't know, but they certainly seem reasonable to me, given the upward pressure on wages and employment costs that are now becoming increasingly apparent. And what this means to me is that we still have a serious inflation threat facing us. And if we have projected inflation at less than it actually turns out to be, then that's going to cross, I think, a pretty important threshold in terms of what it would do to inflationary expectations. And I think that could be very serious indeed. So I hope we can hold it down some--at least as low as the staff is projecting. And I would like to think we can do better than that.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. With regard to the national economy, a point that the staff commented on and that I would emphasize is that it seems the surprises this year really have been almost uniformly on the upside. The incoming statistics seem to continue to indicate strength, as I read them, and it seems to me that we have used up capacity more quickly than we had anticipated.

As I look at the District economy, both the measures of economic performance and the anecdotes I'm hearing suggest to me that surprises may continue on the upside for some time longer. I commented last time that, at least in many of the diversified economies of our District, we had boom or close to boom conditions, and that's continuing in those economies. The one really new piece of information that I picked up in the last several weeks that I wasn't hearing much about earlier--and allowing for all the caveats such as I don't know what the seasonal factors are and the sample is small and so forth--is that I have heard from a wide range of manufacturers about their ability to raise prices now 4 or 5 percent. In some cases this is the first price increase in 2 or 3 years. But they are now putting them in place. And some have commented that this is now the first increase; they plan on another one later in the fall. So for what that's worth, I think I've started to hear a lot more, not about concerns about inflation, but about actual price increases.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Mr. Chairman, the New England economy appears to have moved into a new phase at the beginning of the fourth quarter of last year. For 13 years we were an economy that was growing faster than the economy as a whole, and about 40 percent faster in terms of the rate of growth in personal income. Since September of last year, we've seen a situation in which the rate of growth in New England is running a little over 1/2 the rate of growth of employment for the country as a whole and about the same rate of growth of personal income. I've been analyzing this and I've concluded that the reason for the slowdown is simply sheer shortages of labor. The unemployment rate is 2.8 percent for New England as a whole. And there's just no way that we are going to be a growth area in the next decade, it seems to me. This is causing some embarrassing spinoffs. The governor of Massachusetts has found his revenues coming in well below projections. And, of course, the reason is simply that Massachusetts is fully employed; we can't grow the way we've done in the past.

The only state in New England which is doing better than the national average in terms of growth of employment and income is Maine. And that's the state with the highest unemployment rate and with a lot of people underemployed in the labor force. But the rest of New England is flat out. If you look at the areas of employment for this fully employed economy, there are only two occupational areas where we are doing better than the national average. One is finance, insurance, and real estate, and the other is construction. I find this rather alarming because the reason, of course, is that we still have this big commercial office building boom going on. We are starting to see signs around Stanford of surplus space. But I just got a report from and they're projecting that the current vacancy rate of 11 percent in Boston, which is still low by national standards, is going to drop to 8 percent by the end of 1989. I think this is baloney. And I think what it means is that by the end of 1989, the real estate business--and I'm afraid some of our bankers are going to find themselves having invested in some of these buildings--will be taking on the characteristics of Houston and Dallas. So, I think we are definitely in a turning point situation, which stems sheerly from the fact that we just don't have any labor for growth any more. I see state spending in Massachusetts being projected--, they're projecting a rate of growth of revenues next year of 8.3 percent. It's not going to happen. It can't happen in the slow-growing environment that we are going to have.

MS. SEGER. Big tax increase.

MR. MORRIS. I think something has to give there. It's not going to be before the election. I think the euphoria is going to be disappearing and we'll be facing a lot of the problems of a slow-growing economy.

MR. PARRY. Do you have a significant in-migration?

MR. MORRIS. We are getting some in-migration, but the problem is our housing is so scarce that the price of residential housing has just ballooned in the past few years. It has gone to astronomical levels. We are up to New York and San Francisco levels. And it's very difficult to move people into Boston; they get sticker shock when they see our residential real estate prices. So I think the prospect of more than a modest in-migration is very, very dim.

MR. PARRY. We are getting record in-migration in California. I think it's about 700,000 or something like that a year--it's incredible. And we have similar housing problems, but I guess it's just that you can find cheaper areas. Plus, there's a very large [unintelligible]. That seems to keep a lid on things a bit.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Well, in some ways, Mike Prell gave my report. I think I agree very much with how Mike characterized the economy. Getting to the anecdotal stuff, I really haven't much to add. There is more talk about scarcities in the labor market, even in terms of part-time jobs and things like that. In terms of anecdotes, I think we'll get a better fix on things in early September. I think most of these major companies come back after Labor Day and sit down

and really begin the process of thinking in earnest about 1989 and so on. I think that some of the feedback that should begin to flow out of that will probably give us a better and fresher picture of what the situation is. But at least for now, virtually every comment I hear is very much on the bullish side.

In the context of the outlook and the forecast, I have just a couple of comments. Looking at the external side of the Board staff forecast and, for what it's worth, the New York Fed staff forecast, both have real net exports in GNP terms in the fourth quarter of 1989 below -\$50 billion. And I think that is quite a remarkable result in one sense. But I think it belies something else that gets kind of lost in the dust here--and that is, that both also have for the year 1989 a current account deficit that's still \$125 billion. And those current account deficits are going to have to be financed. I mention that because, while there's a certain element of euphoria in markets and elsewhere about adjustments taking place, the fact of the matter is that in financial terms, as measured by the current account, we still have very, very large external imbalances. And for that matter, the budget deficit is still sitting there stuck somewhere around \$150 billion. So, I don't see that a lot has been achieved in terms of significant progress on both the internal and external financial imbalances that are the root cause of many of our problems.

On the inflation side, I guess my biggest concern by far at this point, Mr. Chairman, is that I think there is at least a 50/50 chance that the inflation genie is already out of the bottle. I don't take any forecast very seriously, but if we look, for example, at our own forecast--which by the way has a very modest increase in interest rates with orders of magnitudes about half of what Mike is talking about--it has a GNP deflator toward the middle and the end of next year at rates of increase of 4-1/2 percent and higher. It has a fixed-weight deflator of 5 percent and higher; it has a CPI of 5-1/2 percent and higher; it has compensation per man-hour at 5 to 5-1/4 percent and higher. By each one of those measures, the acceleration in the rate of inflation is somewhere in the area of 1 to 1-1/2 percentage points over what has been the experience for the past several years.

That to me is very problematic in its own right. But what is particularly problematic is that it just doesn't take much at all for those price forecasts to end up a threshold level higher. In other words, instead of pushing and penetrating 5 percent on some measures you could easily get results that break through the 6 percent level. It takes very little to go wrong, at least in the context of our price numbers, to produce that result.

As I said, our forecast differs from the staff only in the sense that I think the interest rate assumptions or, if you will, the policy assumptions may be somewhat different. But when I look at the situation in that light, it does produce that fear on my part that we may already have an accelerating inflation problem on our hands that is going to be very costly to deal with.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mr. Chairman, with respect to the Greenbook forecast, on a year-over-year basis our forecast would be very

similar. However, looking at the shorter term--and I'm taking about the third and fourth quarters, and particularly the third quarter--our forecast is a bit higher. I hate to describe it as substantially higher, but in terms of final sales, for example, consumption is roughly a percentage point higher or so in the third quarter and also somewhat higher in the fourth quarter. That suggests that the last half of the year is a bit stronger than the Greenbook forecast. And it implies, at least to me, some further pressure on wages and prices that may not otherwise be built into the Greenbook over the forecast period.

With regard to the regional forecast, as has been the case over the last couple--and perhaps the last three--years, we are improving in the District, but at a pace somewhat slower than the national recovery rate, as measured by personal income, for example, employment, and other similar measures. Retail sales are moderately higher than they were a year ago with inventories reported to be about in line--as a matter of fact, being trimmed within the last month or two. Auto sales are holding up; measured year-over-year they are a bit higher than a year ago.

Two areas that are particularly important in our District are energy and agriculture. The level of energy prices has continued to damp the enthusiasm of people for going out and spending money to stick holes in the ground. As a result, there is not much enthusiasm--particularly in that belt which would include Oklahoma, parts of Colorado, and Wyoming, which are still depressed because of energy. Laid on top of that, obviously, is the agricultural situation of the drought, which has been very varied across the District. If you look for example, at Nebraska, parts of Kansas, and western Oklahoma, they've had ample rain and the crops will reflect that. If you look, on the other hand, at eastern Kansas, Missouri, and up into Si's area in Iowa and on east beyond that, the drought has had a very serious impact.

Having that in mind, our numbers are a bit stronger than the Greenbook. It isn't clear to me whether or not some of that may be explained by the drought impact and the timing of that impact on those numbers. By and large in the agricultural sector, there will be an impact on the producers, but if you look into the financial sector that finances agricultural production--as I think Si may have mentioned his survey shows--the banks are in pretty good shape. As a matter of fact, they have gotten rid of a lot of the bad loans over the adjustment period. They have built their capital back, according to our survey, by over 10 percent. And in a sense, they are in very good position to accommodate this drought impact. I would find something to worry about if this were to be a two-year drought instead of a one-year drought; then that story would change dramatically.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I have just one comment and a couple of anecdotes that I've picked up in the last few days. The comment involves the drought-adjusted real GNP growth figures. I too found these very interesting, particularly to see the amount of deceleration that it shows over the fourth quarter. That's really dramatic--from 3.8 to 1.8 percent. So it does paint quite a helpful picture. Also, one thing I haven't heard mentioned in connection with the drought is the

fact that it motivated the people down the street here to rain about \$3.9 billion on farmers in the form of cash. That ought to do something for somebody.

On the anecdotes, a number of people in home building have expressed to me concern about the latest upward move in interest rates. I would say that their numbers are somewhere around 100 thousand to maybe even 200 thousand starts a year more pessimistic than what we are showing. Also, one of the things that has been pointed out to me involves defense spending and the impact of this investigation that's going on here in Washington--looking at the [unintelligible] and procurement process--and what this means as far as the slowdown in the actual granting of new defense contracts and also the payout of some existing ones. This may help your area, Frank; it gets a lot of this money up there.

Also on the export side, a number of manufacturers are very concerned about this rebound in the dollar because they were just really moving forward to emphasize exports and to gear up for producing more products for export. And now, as they see the dollar rebound, they're concerned that maybe they'll get geared up just in time for the market not to be there. I think that that is something certainly to look at, particularly any increase that's above today's already higher levels. And the final thing I've picked up is in the consumer area. I was talking to a couple of days ago, who told me that the only strong area there was sales of air conditioners; you can all figure out why that has been the case. And the sales of lawnmowers have been very weak.

MR. BLACK. I can explain that, Martha.

MS. SEGER. Snowplows are coming up.

MR. BLACK. One of us is really--

MS. SEGER. But it is sort of interesting that that was the exact comment made. This person also mentioned the concern over the consumer debt burden and what that may do in the future, particularly if economic growth does slow dramatically. I believe that some retailers are looking at this variable-rate loan issue and whether or not the higher interest rates in the market feed back into the consumer budget more rapidly, because even though ARMs are often adjusted only once a year, the variable rate credit cards and the home equity lines often are adjusted monthly. Therefore, we would get a more prompt feedback. And I know there is some concern out there that that would be another source of restraint on consumer spending. So, that's just a little bit extra on anecdotes for you. Thank you.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. It seems everyone wants to comment about the drought. Let me mention one item of caution, and that is that a drought has an impact not only upon the supply side of production, but also on the demand side. And no one really knows whether or not the demand side effects are less than or greater than the impact upon the supply side. So, I think I'd have to caution that there is a much larger segment of the U.S. society that is affected by agriculture and the loss of rain. It may affect behavior in regard to consumption as

well as durable goods expenditures. So, I think there's some uncertainty here that needs to be kept in mind.

In the second place, I think you have to remember that just as we have the drought-adjusted GNP figures for 1988, you're going to do the same process for 1989. We are looking at agricultural production in the grain area that is only at 73 percent of capacity; and that's going to go to 97 percent of capacity next year. And you're going to have a dramatic move forward, because when you change the acreage reduction to qualify for government programs from 27-1/2 percent to 10 percent, you're getting more than that change in plantings because the higher price will induce some people not to play the game. That is, there will be farmers who will leave the program restrictions altogether. So there'll be an impact for GNP that is not a capacity or inflation induced impact that does need to be considered. And the final thing I might mention about the drought is that no one really knows how much that bill they passed is really going to cost. It has a lot of complexities in it, in regard to \$50,000 and \$100,000 limitations and whether the \$100,000 encompasses other payments. So there will tend to be, in some sense, probably less actual outlay than may have been anticipated.

CHAIRMAN GREENSPAN. You mean it'll be less than \$3.9 billion?

MR. ANGELL. It could very well be less than \$3.9 billion because no one has really done a microeconomic analysis regarding how many of the people who are supposed to receive the payments will be restricted by the caps. And there will be some farmers who will reject the payments because they do not want to commit themselves to two years of crop insurance. So, there are a lot of uncertainties there.

I think that all of us would recognize that we have more strength [in the economy] right now than we would like to have. And I would agree with Jerry that certainly the rate of inflation currently going on is unsatisfactory. But it seems to me that that's an indication that our policy wasn't exactly what it should have been in previous periods. Certainly, in the fourth quarter of last year and the first quarter of this year, we did not have the monetary policy in place that in hindsight we would like to have had in place.

I think we can learn something, however, by the impact of this discount rate increase and looking at the bond markets. Now, I have looked at key markets because I think there's a lot of instruction there. The bond market weakened, of course, as it always does when the discount rate increases. It almost didn't for 30 minutes this time; the bond market almost tried to remain strong in the face of a discount rate increase, because there were some people there apparently at first who thought that the Fed's going to be tighter, so that improves the outlook for inflation.

CHAIRMAN GREENSPAN. That wasn't the reason. They were all shocked into silence and incoherence.

MR. JOHNSON. They were waiting for the phone.

MR. ANGELL. But it didn't take long for the normal stance to develop, which was that, after all, if the Fed did this drastic thing which wasn't expected--and, of course, it makes the markets a little angry for us to do something that they don't expect us to do--then things really must be worse than they anticipated. And so we have a kind of feedback that, if we are not careful, impacts the bond market. Now the equity markets, it seems to me, also reveal some indication about how monetary policy affects perceptions. And I think the rate of real investment is not unrelated to equity market behavior. It seems to me that in spite of the fact that you can't see everything you want to see, Lee, there's some evidence there to say that there's some restraint in place. I think the foreign exchange markets also certainly can be expected to operate with feedback loops--from the bond market particularly. And when the U.S. bond market has a difficult period of time, then I think you'd expect foreign exchange markets to react to that. My own view is that the foreign exchange markets will probably continue to be stronger than anticipated, and indeed, that's our primary policy mistake--that we did not stand against the foreign exchange depreciation which in a sense is behind [our having] a heavier growth path than we should have had.

I think commodity prices also are showing some effect of monetary restraint. And I don't know whether the rest of you have noticed it or not, but to me it's kind of pleasing to have M2 be on a 4 percent growth path; and maybe we'll get it down to 3 percent. When you get ready to do your report, Don, I guess I want to find out what impact a 9-1/2 percent fed funds rate and a 10-1/2 percent rate will have on M2 growth. Certainly, that seems to me to be a difference. And I guess it's pleasing to me to see that when M2 growth got up to 8 percent and right above our target range that, policywise, we were able to turn that around and bring that down to an acceptable level. Now I don't know whether 4 percent is right or 3 percent or 2 percent, but I guess I'm more confident than others are that if we stay with 4 percent or 3 percent or 2 percent on M2 growth that things will work out so that we'll all be happy with the inflation results down the pike.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. Let me start out by observing that there's an enormous difference between the tone of this discussion and the tone of the discussion that you would hear, for instance, in the OECD economic policy committee or WP3. When foreigners are talking about the United States these days it is generally with admiration: Gee, I wish I were in your shoes--with the possible exception of the Japanese. I listen to this discussion here, and it is probably the most pessimistic discussion I've heard for the last two years around this table. I'm not exactly sure what accounts for that difference except that people look a lot more skeptically at their own future.

Overall, I still think everything is going more or less according to plan. If you look at the various components of GNP, we continue to have the best progress in the export sector and the investment sector, and that's exactly the way it should be. We had growth last quarter of gross domestic purchases of 1.1 percent. If you look at the projections out--2.3, 1.4, 2.7, 1.7, and 1.2 percent--they are all in that ballpark range. So, certainly it's not going to be a runaway economy in any sense of the word. Yes, there are certain

areas where we do see shortages; quite a few people have talked about skilled labor shortages. But I fail to see how a tight monetary policy will produce more skilled workers to alleviate that particular shortage.

Actually, I saw a very interesting article produced by the Chicago Fed research department that was arguing essentially that the wage pressures wouldn't be as pronounced as many people were going to expect. I don't like the PPI increases any more than anybody else; I think that is a worrisome index indeed. But on the other hand, as Governor Angell just pointed out, the commodity prices which are even further down the pike, are again very well behaved and roughly on the level that they were exactly one year ago. I think the difference between the GNP deflator and the fixed-weight price index isn't only due to base periods and things of that sort. It's due to the fact that Americans are smart and they are shifting away from the expensive products to the less expensive products. As a result, actual inflation is less than the inflationary pressures which are emanating from some sectors.

The dollar continues to be strong as well. I think overall if you have to make a judgment on whether you really want a much stronger economy, you would say no. Do you really want a much weaker economy? I certainly would say no. And, therefore, I've come up with the conclusion that we shouldn't tinker all that much.

CHAIRMAN GREENSPAN. Any further comments on this round robin?

MR. HOSKINS. I see commodity prices as having moved up more than Bob Heller does. I look at the indexes in the Economist magazine and they're all up 20 percent or better versus a year ago.

MR. JOHNSON. Depends on which one you look at.

MR. ANGELL. It depends on which index you're looking at.

MR. HOSKINS. Well, [unintelligible] whether you're using SDR, dollar, or sterling index.

CHAIRMAN GREENSPAN. Have they got grains?

MR. JOHNSON. Yes.

MR. ANGELL. The Economist index is the highest year-over-year rate of increase of any index.

CHAIRMAN GREENSPAN. That's [a reflection] largely of grain.

MR. HOSKINS. I can't tell what's in it. It just says all items, food, industrial.

MR. HELLER. If you're looking at the Federal Reserve index, it's within a fraction of a percentage point from the level a year ago. Is that correct?

MR. JOHNSON. It's the same with the Journal of Commerce. But there are a couple of them that are much higher; there are a couple that are no change.

MR. HELLER. Especially some indexes that are weighted.

MR. JOHNSON. Depends on what you weight it by, too.

MR. PARRY. Bob, you made the comment that the slowdown is just what the doctor ordered. Is that correct?

MR. HELLER. Domestic.

MR. PARRY. Domestic that we see in the forecast. What is the monetary policy implication associated with that forecast?

CHAIRMAN GREENSPAN. That's the next session. Governor Johnson's got a relevant comment.

MR. JOHNSON. I don't know if it's relevant, but I've got a comment. I think everyone has laid out the risks pretty well. Almost everyone agrees that the risks are on the upside, and that's the way I feel. I think the risks are tilted more toward the upside, although I don't think they're zero on the downside either. We've seen that even with a half point change in the discount rate--it went from 6 to 6-1/2 percent, relative to where the funds rate is now. And in the scheme of things, you wouldn't think that would be a big factor, but you see nervous ripples in the financial markets when you do that. We've all seen over the last year or so how expectations can change fairly dramatically. And I think we have to be cautious about that. So, I think we should be concerned about the magnitude [and] the timing of the actions we take.

CHAIRMAN GREENSPAN. It seems to me you're also getting over into the next session.

MR. JOHNSON. Okay, I'll get away from that. But the other thing I wanted to say on the overall view, in terms of actions that we've taken in the past and depending on what we do in the future: I don't think it's going to be that easy to manage the adjustment process by the actions we take. I think our moves, in the past, have had an effect of strengthening the dollar, and they would continue to do so. They're going to affect both domestic and overall demand. Either the exchange rate flows through and it weakens our competitiveness some, or foreign central banks try to stabilize the dollar and you're going to get a weakness on the foreign demand side. I know Ted pointed out there are some lags. But eventually that'll take place. So I'm not sure we should believe that we can get the adjustment process at the same time we get the slowing down. I think most of what we are seeing on the adjustment process is a result of where the exchange rate has come to this point. We've had a substantial adjustment on the discount rate; we'll have lagged effects for some time to come. But I think a price-stable economy here is consistent with a fairly large current account deficit. I don't think you can get them both down unless you have--I don't know, maybe a major recession would do it. But I'm not sure that's in our interest to do.

CHAIRMAN GREENSPAN. If there are no further comments, and before we break for coffee, I was hoping that Don Kohn could get his remarks in.

MR. KOHN. Thank you, Mr. Chairman. You'll need the coffee. It turns out my comments overlap substantially the subjects Governor Angell covered, post-drought anyhow. Wayne, you and I will have to think about the implications of that some time together. [Statement-- see Appendix.]

CHAIRMAN GREENSPAN. Thank you Mr. Kohn. We'll take a break now and when we come back we will first discuss what Don has been suggesting and then we'll go to a round robin on the Committee discussion on policy.

[Coffee break]

CHAIRMAN GREENSPAN. [Unintelligible] Mr. Kohn and Governor Angell.

MR. ANGELL. Don, I appreciate your--

MR. KOHN. Oh, I thought the questions were going to be for Governor Angell.

MR. ANGELL. Well, fortunately, I get to ask the questions.

MR. KOHN. Okay.

MR. ANGELL. Don, for the fourth quarter of 1988 and the first quarter of 1989, M2 growth was, I think you said, 4 and 3-1/2 percent. Could you give me some confidence intervals on those estimates?

MR. KOHN. Actually, I'll give you our point estimates and you can put your own confidence intervals around them. Mine would be very wide; I have 3-3/4 percent for the fourth quarter of 1988 and 3-1/2 percent for the first quarter of 1989.

MR. ANGELL. Do you want to give me the standard error of the estimates then on--

MR. KOHN. No. I don't have one, but--

MR. ANGELL. Well, give me just sort of a range.

MR. KOHN. Oh, I would say plus or minus 1-1/2 percentage points.

MR. ANGELL. Oh, that's pretty narrow. Okay.

MR. KOHN. I just made that up.

MR. ANGELL. I don't mean to cast aspersions on your forecast, but that's pretty tight.

MR. KOHN. The basic point, as I see it, is that the rise in interest rates that we already have will be damping M2 growth relative

to its rates so far this year. So, I think we'll be seeing things at least below 6 percent, or under 5 percent. Now, I don't know how far under it will be--3-1/2 or 4 percent is our basic forecast--but I think the message is pretty clear.

MR. ANGELL. Thank you.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. On page 12 of the Bluebook you say that the tightening of reserve positions under alternative "C" immediately following the discount rate hike would be somewhat surprising to market participants. I find that statement surprising. It seems to me that the market is anticipating us to follow-up the discount rate increase with a firmer policy and that they'd be surprised if we didn't.

MR. KOHN. I think that's true in a general sense. If you look at, say, futures market rates and things like that, bill rates are a little higher by the end of the year than they are now, but not by a lot. And I guess I think generally they expect us to firm. I'm not sure they'd expect a full half percentage point. The Bluebook in part was addressing that point--another half percentage point on the funds rate a week after the half percentage point increase in the discount rate. I think you're right in the sense that the market is anticipating some gradual firming of the funds rate over the remainder of the year. You can see that in these surveys of market expectations. But I don't think they'd be anticipating something of this magnitude this soon; that's all I meant to say.

MR. JOHNSON. Wouldn't you see that in bills? I don't think you've seen that in the spread of bills over the funds rate. You've had a little bit of upward pressure, I think, because of supply conditions, due to the suspension of the long bond. But you don't see a big spread developing in bills over the funds rate.

MR. KOHN. No, you don't. In fact, the bill rate looks a little low relative to the funds rate. I would associate that a little bit with some of the uncertainties associated with a discount rate increase, a little flight to liquidity--not much, but a little. But I think if you do look at the--

CHAIRMAN GREENSPAN. The futures markets don't show the type of tightening that's in alternative "C".

MR. KOHN. Not in "C", no. But at least the money market services surveys that we get do show some gradual firming seen by--

CHAIRMAN GREENSPAN. Well, the question is, which is the more valid approach: to look at the futures markets for the Treasury bills, or at a survey of forecasters?

MR. KOHN. If the forecasters have the investment funds, they ought to be consistent with one another.

SPEAKER(?). That's right.

CHAIRMAN GREENSPAN. And if they are not, which do you choose?

MR. KOHN. I don't have specific numbers in front of me.

CHAIRMAN GREENSPAN. My recollection, however, is that the forward markets are showing less of an increase than is implicit in the forecast.

SPEAKER(?). That's right.

MR. KOHN. Certainly less than alternative "C".

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I think this is a version of Governor Angell's question. But what has been the historic performance of the M2 model or equation recently? Has it been tracking reasonably well?

MR. KOHN. It's not too bad. We missed last year--actually the GNP revisions didn't do us any favors because M2 was low already relative to the model projection by about a percentage point. Now it's low by about 2 percentage points after GNP was revised up. We have several models, but one of them I'm looking at--this is one that missed last year by about 1-1/4 percentage points in fact--was right on in the first quarter and underpredicted the second quarter by a couple of percentage points. It hasn't been bad. You should understand that these projections are not strictly model-based projections. We do take into account the errors that the models have been making, and make judgmental adjustments for that. We pay perhaps a little more attention to what they tell us about the interest rate effects; and then we factor that into our own sense of where velocity is going and the projections of income growth that we get from the Greenbook.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Don, both alternatives cover a relatively short period of time. Would you indicate which of the two alternatives, "B" or "C," is most consistent with the policy assumptions in the Greenbook forecast?

MR. KOHN. Well, for the next six weeks it hardly matters, but the Greenbook really didn't have an increase of interest rates in that very short period of time necessarily behind its forecast.

MR. PRELL. Nominally, for the current quarter, we take the existing funds rate as given through the end of the--

MR. PARRY. The quarter?

MR. KOHN. Yes.

MR. PARRY. So, it's really more consistent with "B," you'd say?

MR. PRELL. Yes, but basically for the GNP forecast, we are more interested in the drift over the next several quarters.

CHAIRMAN GREENSPAN. I think it's consistent with "B" but going to "C" the next time.

MR. KOHN. Firming some at some point in the fourth quarter.

CHAIRMAN GREENSPAN. Any other questions? Lee.

MR. HOSKINS. Don, I took it that the last part of your discussion, with respect to operating procedures, was [a suggestion] that we might want to discuss them. So I guess I would like to make a statement about them in terms of my preferences. There were basically three options that were laid out: one is fed funds targeting; another is in between which is sort of half fed funds and half borrowings; and the last is straight borrowings target. In my view I would prefer straight borrowings target if, as you suggest, we can live with it in terms of allowing the funds rate to fluctuate a little bit more. I think there are disadvantages to doing what we are doing--that is, sort of half fed funds and half borrowing--because I do think it leads to some confusion in the marketplace. If I had to choose between the three options, I would choose the borrowings target because I think it's the cleanest and it's the one that leaves us with the best chance to get back to aggregates targeting, if we ever get confident with using the aggregates. But I would take explicit funds rate targeting over what we are currently doing, as long as we stay on what I would call an economic conditions kind of policy--that is, responding in the short term to changes in the numbers. It seems to me we are much better equipped to do that with an explicit federal funds rate target. But we have to be aggressive if we are going to move it and get around the concern that you had with that--that it gets too narrow on us. And it has been.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Don, in connection with this issue of the deviation of the fed funds rate from the borrowing target, seasonal borrowing has been relatively high. How much of the deviation do you think is caused by that? And doesn't this high seasonal component suggest that we perhaps need a higher borrowing target than we otherwise would?

MR. KOHN. I'd say it goes the wrong way. The idea of seasonal borrowing is that it doesn't respond quite as much to interest rate pressures as regular adjustment borrowing. You have an autonomous seasonal factor influencing that borrowing that should tend to bias the funds rate down rather than up relative to our expectations. So I would say that for some time the seasonal borrowing hasn't had any effect. It might at very low levels of adjustment plus seasonal borrowing targets, but we are not there any more. I think the most recent period is evidence of that. But you're right. If you thought that somehow it was having an influence, you'd raise the borrowing target at even higher federal funds rates. But I don't think it is.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I think I share Lee's objective of getting back to the point, if we ever can do this, where we can really control this supply of reserves--somehow measured--so as to control

the rate of growth of the money supply. To put it I guess a bit unkindly, it seems to me that what we do now really is sort of a modern-day version of the real bills doctrine, in a sense. The market gets all the money it wants at some price or some borrowed reserve level. If it wants more, we pump out the reserves and we say the demand for money has increased. If it wants less, we sop up reserves and say the demand for money has declined. If we want to nudge it one way or another, through either the borrowed reserve target or through manipulating the federal funds rate, we change the price of money--in much the way the discount rate used to function under the old real bills doctrine. So I really don't see that it's much different from that.

But, given the uncertainties that people feel exist in the aggregates at the present time, I think I would come out a little different from where Lee does on which of the various alternatives we should use. I would use the federal funds rate. I think we are confusing the public, we are confusing ourselves, and we are confusing the boards of directors by going through the borrowed reserve target. And in recent days, we've been resolving all doubts in favor of the federal funds rate, and I would prefer to just use that federal funds rate as long as we are on this kind of regime. But I think at some point the aggregates are going to behave in a more normal, predictable, way and we can reduce this degree of fine tuning that we've been following. And only then will I feel very comfortable with any policy decision. Now we have to pick out a level of interest rates somehow defined, and predict what will happen. The way I do that is to figure out what I think it is on an ad hoc basis and then I bear in mind that most of our mistakes I think have been on the side of being too easy, historically. So I put in a fudge factor and vote for something a little tighter than I think it probably ought to be on the ground that that's the way we usually miss. But I do hope our simulations suggest M2 is beginning to behave reasonably normally now; Don verified that to some degree. And I hope somewhere along the way we can get to the point that we are really controlling the supply of money rather than letting it be purely demand determined.

CHAIRMAN GREENSPAN. I think that's one of the most interesting events--which we haven't really focused on in the last six or nine months--how well behaved M2 has been.

MR. ANGELL. M2.

MR. BLACK. It has been very good really. Wayne said a while ago he was taking considerable comfort in M2; and I was taking a lot of comfort in that, too, until Don pointed out that it was the RPs and the Eurodollars that were weak. The consumer-type components of M2 were relatively strong, so that reduced my degree of comfort. Still, that's something that makes me feel better than I otherwise would because they've been--

MR. ANGELL. But Don, you've got built back in some rebound in those.

MR. KOHN. That's right.

MR. ANGELL. And you've got weakening in the reserve balance, so that's still accounted for in the forecast.

MR. KOHN. In that--

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Caught me drinking.

MR. BLACK. He can do that to people.

MR. BOEHNE. On the issue of whether we have this hybrid, or borrowings or a federal funds target, there is no right answer here. And at different times one will be better than the other. But there are some lessons I think to be learned by both the successes and the mistakes of the past. You laid it out, Don, as kind of three choices: a federal funds, borrowing, or hybrid. But really the choices are over a much broader kind of a continuum. If you think, for example, at one end of that continuum you have a pure reserve targeting and at the other you have a pure federal funds targeting, and you think of reserves as a 10 and federal funds as a 1, this borrowing approach that we have been using the last few years is probably a 3. It's pretty close to federal funds rate targeting. It is a compromise toward taking account of the federal funds rate. If we compromise it further along the lines that we've been doing, we really move very, very close to a federal funds rate target. And there are advantages, and there are disadvantages.

But I think that if we look back over our history, if you have an approach that--as we had with the borrowing figure--has a wiggle factor, it does allow the market to tell you something. It does allow the market to tell you that there is a greater demand for reserves. It also avoids the trap of pegging a federal funds rate. Now, I know that there is no one around this table who would ever, ever get caught up in the problems of pegging the federal funds rate. However, that risk is there for lesser mortals and I think one has to keep that in mind. The other thing is that it's easy around this table to ease. There's no trouble for a central bank to ease; that's very easy. The hard part is what we've been doing the last few months, to tighten. We need all the help that we can get when we find ourselves in that situation. And I think that the give that the borrowing approach allows in that procedure has been very helpful in the snugging up that we've been doing since March. And I think the more we move over to a federal funds rate, the more difficult it would be to follow that kind of snugging up. It's true that the market has led us sometimes; sometimes it was good, sometimes bad. We ought to be making decisions, not the markets. Nonetheless, when you get to the practical side of it, I think this technique was helpful for us to get out in front of the inflation curve earlier than I ever recall doing it. And I think this procedure helped.

The other thing is--and I think this is an issue that one can talk about--that this procedure does give the Chairman a little more leeway than a federal funds target. And I think that, when we meet every six to eight weeks, it is important for the Chairman to have some leeway in this. Maybe everybody around the table will not agree every time he uses that discretion. But the way the markets operate, the way they're fast changing, and timing issues and all that, I for one think that it's important for the Chairman to have a little leeway. So that's where I come out. Even though there are disadvantages to reserve targeting or borrowing or whatever, I would

not like us to move any more in the direction of the federal funds extreme. I would prefer to be pretty close to the borrowing rather than this hybrid that we've backed into the last six weeks.

MR. JOHNSON. But, Ed, don't you think if you have asymmetric language that the Chairman could just as easily choose to move the funds rate as he could a borrowing number?

MR. BOEHNE. I think, Manley, he could. I think he could in theory. I think in practice that this borrowing procedure gives him a little more flexibility and gives us a little more ability to move sooner than we might otherwise. I can't prove that's the case.

CHAIRMAN GREENSPAN. I think it proves that it is the case-- that it's easier to move a borrowing target than it is to move fed funds.

MR. BOEHNE. Right. That's my point.

MR. BLACK. That's basically a political argument.

MR. BOEHNE. If the Chairman calls up and says I've upped the borrowing \$50 or \$100 million that's one thing. If he calls up and he says I've upped the federal funds rate a quarter percentage point, there's a difference.

MR. ANGELL. The political perspective is quite different. If someone said well, the Chairman moved the fed funds rate--

MR. BOEHNE. Right.

MR. JOHNSON. I just can't comprehend that, I'm sorry.

MR. HELLER. Obfuscation.

MR. JOHNSON. Yes.

CHAIRMAN GREENSPAN. I think there is a case--

MR. BLACK. It's a political argument, though, and I think that's the strongest argument that Ed has made for the borrowing target. And I think that's why we stuck with it.

MR. BOEHNE. I think if you're completely logical, Manley, you come out where you do. I just don't think human beings and human nature are completely logical.

MR. JOHNSON. But you're saying the Chairman would somehow have illusions himself that a \$50 million change in the borrowing is not moving the funds rate?

CHAIRMAN GREENSPAN. Yes.

MR. BLACK. I think [unintelligible] moves it, so be it.

MR. PARRY. It seems to me that characterizing the recent period as being a hybrid is maybe a little bit too strong, because in the last statement periods we've really hit borrowings right on the

head. And some times and days, there may have been some attempts to resist the funds rate. But if you are getting your target, then you must be pretty well content with the interest rates that are resulting from it. I know there was a problem very early in July, but I don't know that it has been operating all that poorly in the last few weeks. Would you agree with that Don, or not?

MR. KOHN. Well, I think we came out fine.

MR. PARRY. Yes.

MR. KOHN. But we did engage in some operations at certain times that we wouldn't have done if we'd been just paying attention to borrowing. In the end, everything turned out terrific.

MR. PARRY. That's right.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Ed Boehne has said much of what I wanted to say I think, except that he came out the wrong place. I happen to view what has happened over the last few months--that is, the borrowing target as moderated, if you will, by the federal funds level--as providing the flexibility that I think serves this Committee fairly well, at least at this time. I must say that over the long haul I would move to the borrowing target. But for the near term--the rest of this year at least--I like what we've been doing.

I agree with the proposition that moving the borrowing target is much easier, much more acceptable, and perhaps of some greater comfort to the Chairman, than moving the federal funds target. But I don't think we ought to be deluded. What we are doing when we are moving the borrowing target is targeting what we believe to be a federal funds level. But they work together; they have worked together over the recent past, although apparently there's some confusion in the market that I don't quite understand because of the Desk operations. I would not want to change at the moment; I'd like to do what we've been doing. I have a question I guess for Don, following onto Bob Forrestal's comment with regard to the seasonal borrowing level, which has peaked, and I think is at an historical high.

MR. KOHN. That's correct.

MR. GUFFEY. Roughly at \$400 million.

MR. KOHN. Right.

MR. GUFFEY. Traditionally, that starts running off about mid-August on down to the end of the year. Given the fact that we might maintain, for example, a \$600 million borrowing level, my question is, with that seasonal running off, does that imply that we have a built-in tightening if everything else remains the same?

MR. KOHN. If you believe that the seasonal was having an effect on the funds rate it would--that's the direction it would go. I guess I would just reiterate that our work in the past has failed to uncover a significant effect of that sort. Your direction is right; I

don't disagree with your analysis. It just doesn't seem to show up in the data when we've tried to control for it. I think it would if we were at much lower levels of borrowings, perhaps. But particularly at this level, I guess I wouldn't expect it.

MR. GUFFEY. But over the last two or three months we've been essentially at a frictional level of adjustment borrowing.

MR. KOHN. Very close to it.

MR. GUFFEY. If you give credence at all to seasonal borrowing [unintelligible] some slightly different characteristic--.

MR. KOHN. I would say a bit above there, but not that far above.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I can certainly accept targeting a borrowing figure. But it does concern me when the fed funds rate whips all over and then that confuses market participants. But I think the way to fix this--maybe we can discuss this issue at some future luncheon--is to release our minutes more promptly so people will know what we are up to. Then they wouldn't have to be going through all these little subtle signals trying to figure out what it is we are really doing. And, you know, if the fed funds rate goes to 9 this afternoon at 3:00, some people are going to suggest probably that it's there because we put it there. They won't know. I think that getting the information out more promptly about what our policy moves are would help to calm the markets down and would really eliminate some of this confusion.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I may be a little confused, but I think this is the third time we are discussing this, and it has already been resolved twice. So perhaps it's already--

MR. BLACK. This is not the only issue that has ever been discussed three times.

MR. MELZER. On the merits, I'll simply say I really feel strongly that it's in our interest to define our business as being in the business of reserves and not rates. I understand the linkage between the borrowings target and the funds rate, but the funds market has automatically been extended to other markets. And as soon as the public and politicians attribute to us having control over interest rates, I think we are on dangerous ground. They do enough of that anyway. So I think it's important how we define our business.

Secondly, I'd say when policy is on the move there's going to be volatility in rates. There's more uncertainty, and that's going to be the case. I don't think it's a bad thing. And finally, even when the market gets ahead of us, it's not necessary to validate what gets built in. Now, I think it has made sense to do it where we've done it; and I've been in favor of that. But, for example, as we sit here today with a statement having been made with the discount rate, I think we have the flexibility not to validate what might be getting

built in now and not give up any ground at all in terms of where we think we need to get. Those are the thoughts I have.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I think the problem that a lot of people perceive--and that's why it's on the table for a third time I guess--is precisely the problem that Joan was describing earlier, where the market was perceiving one thing and then the Federal Reserve was almost led along the path by the market. And unless we chose to do the opposite, in essence, we were caught. And that, I think, made some people uncomfortable.

I think the other problem is that quite often you do have these technical problems. Recently, there haven't been any technical operating problems; but get a computer failure or encounter rainstorms in certain areas of the country, and borrowings are all over the map, and as a result, it gets difficult to really see what's going on. In addition, as Don Kohn was talking about, the reluctance of bankers to borrow or maybe a tighter administration of the window--which has not been suggested recently, but had been raised earlier--was perhaps influencing the amount that was actually being borrowed.

I think overall I'd be in favor of moving closer, as President Melzer said just a minute ago, to the reserve targeting, because that's what we ultimately want to do. Obviously, there are problems [with that approach] too. So, if we can devise a procedure that gets us to a 5 or 6 on Ed Boehne's scale, I'm certainly willing to listen. But technically I haven't exactly figured out what that procedure would be.

CHAIRMAN GREENSPAN. I think we all would like, if we possibly could, to get back to some form of money supply targeting, reserve targeting, because in fact that's what a central bank does. I think if it weren't for the extraordinary breakdown of relationships, we would never be having the first, not to mention the third, conversation.

MR. HELLER. But, Mr. Chairman, the one thing that you can't fail to wonder about is why the relationship is better again than it used to be. Maybe it is because we are doing something close to fed funds targeting. And in that environment, you may see the money supply and GNP relationship being reestablished. And [perhaps] as soon as you start controlling "M" again then that relationship will tend to break down the famous Goodhart's law.

CHAIRMAN GREENSPAN. Well, in an odd way, we are where we are controlling M. We all have been focusing on the--

MR. HELLER. Yes, but in a short-term operational sense.

CHAIRMAN GREENSPAN. But, we are not doing it day-by-day. I think that there has been a fairly consistent awareness of the fact that M2 has in fact been well behaved. Were it otherwise, I would suspect you'd be hearing different sorts of reactions at certain different times around this table.

MR. ANGELL. Absolutely.

CHAIRMAN GREENSPAN. Are there any other questions for Don? If not, let's get to the policy questions. Let me see if I can summarize what I think I'm hearing at the moment. There seems to be little change in the general view that the economy remains quite strong and that the underlying structure is firm. There are a few marginal weaknesses on the edge, but remarkably few relative to this stage of the business cycle expansion. In fact, I didn't even hear mention of weakness in the apparel-textile area, which is the only thing that I've been hearing in any context. Apparently it's not a big enough issue to be talked about.

The thing that concerns me the most at this point, as I mentioned on our telephone conference the other day, is that inventories remain--as somebody put it--lean. That is reflected in low inventory-sales ratios and in remarkably contained lead times on the deliveries of materials and equipment. In fact, if anything in the last two or three months--leaving July out--lead times have actually softened some, suggesting that the usual underlying elements which generate demand for inventories have been largely absent. And yet it is very difficult to find a business cycle expansion that at its tail end does not begin to show some pickup in [inventory] accumulation. There is some accumulation going on in steel and some of the other materials, but in general it's not a big deal.

It strikes me that our policy thrust ought to be in the area which cuts the top off of inventory accumulation, and if possible, capital goods accumulation. Real short-term rates are very crucial issues in inventory policy. We must be, I think, in a position where we feel comfortable that we are not financing a bulge in inventories that will eventually topple the whole system. And I think that we're not, but I'm not quite clear what to read into the July industrial production index which, looking at the detail, struck me as the type of distribution of output which is more suggestive of a backing up of materials production than shipments into the final sales area. In any event, whether one looks at it in terms of capital goods or inventory, there's just nothing out there which suggests that this is not continuing and will possibly even be moving at a rate in excess of the Greenbook [projection].

And what that tells me is that the odds are obviously strong that we will be having to tighten again in the future. As a consequence, I think there's no doubt that we should be continuing with asymmetrical language. At the moment I myself am content to sit tight, at least for the short run, largely because I think we shocked the market with the discount rate more than I thought we would. I was, I would say, uncomfortable with the Japanese markets and a little uncomfortable with our own. I think they're stabilizing now, but I do think that they still have adjustments coming from the discount rate for a while. I don't know whether or not it's several weeks, or longer, but I'd feel quite comfortable at this stage staying with the \$600 million of borrowing requirement, but maintaining asymmetrical language, as a consequence of acute awareness that any forms of evident problems get met with tightening. Governor Angell.

MR. ANGELL. I agree with you that the markets, particularly the equity markets and to some extent the bond markets, did react in such a way as to indicate that a discount rate change is more than a \$200 million change in borrowings. It really shouldn't be, but it

does seem to be. I would favor the \$600 million. I favor the increase in the fed funds trading range, that is 6 to 10 percent, to go with that. I would also be most appreciative if there was support here for moving the behavior of the monetary aggregates up in the order [of the factors listed] in the operational paragraph. I would prefer having it go to first place. I could certainly settle for it being in second place. In fact, if we said something like "the behavior of the monetary aggregates consistent with reductions in the rate of inflation"--that combination would seem to be very appropriate for me. By that I don't mean that the growth rate of M2 in any one month ought to be a cause for a dramatic move. What I would mean would be that if the 26-week rate of change of M2, for example, were to get below 3 percent, I suppose that to me would be significant.

CHAIRMAN GREENSPAN. Do you accept asymmetric?

MR. ANGELL. Asymmetric would be fine. I would prefer symmetric, but I'd accept asymmetric. If I can get monetary aggregates, I'll take it.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I think the Chairman said it; his statement is clearly consistent with mine. As I said before, I think that the risks are still on the upside. I think we need time to see how the market digests this discount rate change, but I think we should be prepared to move [on the basis of] the economy's performance--especially if the inflation indicators continue to show pressure. But I think at this stage, the appropriate action is to support asymmetry in the language and maintain the \$600 million borrowing with the discount rate where it is. Let's see how those winds blow.

CHAIRMAN GREENSPAN. Would you respond to Governor Angell?

MR. JOHNSON. On Governor Angell's point, I wouldn't mind advancing the aggregates in the list a little bit if we all agree that they're behaving a little better. But inflation pressure I think is number one, the major issue. I'm sort of agnostic on whether the M2 demand is behaving that much better. I somewhat agree with the possibility of what Governor Heller suggested--that M2 velocity has something to do with the stability--the prediction accuracy on T-bills and short-term interest rates, to some extent. So, I'm satisfied with where it is, but I can support moving it up; I'm sort of indifferent.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. When I joined the Board somebody told me that alternative "B" was always the correct one. I'm grateful to the staff that there are alternatives "B" and "C", so "B" is still the correct one.

MR. KOHN. We had a long debate in the Bluebook meeting about whether we should cut off the first letter of the alphabet.

MR. HELLER. You've got to make it easy. I'm happy to support alternative "B". And I think the Ms are right in the middle of the target range; that's very good. I think we should avoid

adopting a stop-go policy so we are not overdoing it on the tight side and see that danger would be there. I think I'd go along with Governor Angell on giving the monetary aggregates a bit more prominence. I'm not sure I want to move it to the first spot, but somewhere in the middle is fine. I think that that would be very good in front of foreign exchange and domestic financial markets. Overall, I support \$600 million borrowing and I'd prefer symmetric language but be happy to go along with asymmetric.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I can support alternative "B" considering how recently we tightened and also the short time before the next FOMC meeting. However, it seems to me that further tightening will be needed soon, if it isn't needed now, and that alternative "B" can hardly be described as a policy that keeps us ahead of the curve with regard to the problems of excessive economic growth and intensified inflationary pressures. Therefore, I strongly recommend the asymmetric language. It would permit a tightening of policy in the intermeeting period if incoming data indicate no significant deceleration in economic activity. With regard to the ordering of the phrases in the second sentence of the operational paragraph, I would not be in favor of changing the position of the monetary aggregates because I know how quickly their behavior can change and we might regret moving them up to a more prominent place this early.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I agree with what you outlined, Mr. Chairman, the \$600 million and asymmetric language. I feel strongly also that we are going to have to move again. I'm particularly concerned about the very rapid growth in the last couple of months of the narrower aggregates. And picking up on what Bob Black said earlier, I think that the nature of our implementation of policy is such that if the demands are there in the market for reserves we'll fill that demand at the given borrowings level. So I think we can't be complacent that we've done enough, certainly. But I also agree with what you said: I think it's important to let the prior move get digested. And I don't feel strongly that the ordering in the language has to be changed.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Mr. Chairman, it seems to me that everything that we've heard around the table this morning plus the incoming data suggest that if the economy continues to be very strong we are going to have to take another move fairly soon. But I don't think now is the time to do it. One of the concerns I would have about moving right now is not only the shock to the domestic market, but also the destabilizing effect that it might have abroad--in the sense that you might get a ratcheting of rates around the world if we were to move very quickly after the action we've just taken. So I come out that we should stay where we are with the \$600 million of borrowing. But I feel very strongly that the language should be asymmetric. With respect to the ordering of the directive, I don't really see any compelling case to change the order. I don't think the relationship between the economy and the monetary aggregates has been established, and I think the order does suggest the way in which we look at things

for purposes of making policy. While I don't feel very strongly about it, I would rather keep it the way it is.

CHAIRMAN GREENSPAN. Governor LaWare.

MR. LAWARE. I'm completely in agreement with the analysis of the strength of the economy. I feel a little bit like I was in a vehicle that was accelerating down the road and I have an instinctive desire to hit the brakes a little bit and snub it down. But the thing that worries me is that I think the road's a little slipperier than it looks in the sense that there's some fragility in the infrastructure of the economy.

First of all, consumers have a heck of a lot of debt. And the most recent instruments of that debt--equity credit lines, as we call them--I think have been abused in the granting throughout a large part of the industry. I think there's a significant danger that if we got into any kind of a downturn in the economy we could have a lot of consumers in a considerable amount of trouble in that particular area, because they've converted other kinds of debt to equity credit lines.

Probably more important, however, is the heavy debt structure in the corporate sector. If you were to look at as many of these leveraged buyouts and takeover schemes as I have, you would find that in a lot of these the cash flows that are designed to service the debt that's involved are very skinny indeed. And they depend on a relatively stable interest rate structure and the ability over a reasonably short period of time to liquidate assets in order to get debt down to manageable levels. Well, it seems to me that a significant increase in interest rates--even one as modest as the one described in the Greenbook--over the next 12 months or so could create some major problems, at least for some of the situations that I've seen. And that could have a very sobering effect, it seems to me, on the overall economy through the problems that would be incurred by some very large companies.

Another one that I guess tends to slip out of our minds occasionally is the real estate situation. It has been getting better, not only in the banks--which have increased their capital in order to sustain the possible losses in this area--but also in the country generally. The country has been benefiting from lower interest rates and the ability to restructure some of that. It seems to me that a lot of that ground that has been gained could be lost if the cost of servicing that debt goes up significantly, as it would because much of it is denominated in variable rates. Finally, this thrift situation--an aspect of which we intend to discuss at the luncheon today--has not gone away. It's getting worse. And a significant increase in the cost of money to these troubled thrifts is just going to accelerate the rate of loss in that industry.

When you take all of those in the aggregate, it seems to me if we snub the brakes too hard and too fast, or oversteer this vehicle, we have a risk of going into the ditch. All I'm suggesting is that, while I think snubbing the brakes and being prepared to do so is important, I think we have to keep a very close eye on what the effects of significantly higher interest rates could be and be ready to ease up quickly if that happens. I'm not sure I understand all of the terms like asymmetrical language and so forth, but I certainly

would support the \$600 million target on borrowings. And I'd lean more toward the borrowings and reserve targets as opposed to either the funds rates or, with due respect to my friend Governor Angell, the aggregates.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, a while ago I commended Mike Prell and his associates for producing drought-adjusted figures on GNP. I would like, with equal vigor, to commend Don Kohn for producing an asymmetric Bluebook. I agree completely with what you said on policy, and a willingness to act further if the need should arise. I also agree with your statement that it might well happen that we will need "C" next month. [If that's the case,] I would hope we would have an intermeeting telephone conference like we've had. And finally, I would agree completely with Governor Angell's suggestion that we move the aggregates up to number one, which probably doesn't come as a great surprise to some in this room.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Well, I find it a close call between whether we tighten further now or whether we wait for a while. I think your suggestion about asymmetric language resolves that as far as I'm concerned, so that the specifications of "B" with asymmetric language look okay to me. I do think it probably pays here to take a little pause at least, and assess the results of our actions to date, given the uncertainties associated with any forecast and errors that go with these things as well. Along those same lines, I would admit that I take some comfort anyway in the slowing in M2 and the prospective slowing in M2 if Don's forecasts are in the ballpark. I would not be at all troubled if that in fact materializes, or even materializes a little more pronouncedly than Don envisions. I think that will help keep us on the right course.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, I agree with the policy prescription as you outlined it. Going back over the past several months, I think the record's been good; we have been moving in the right way. And I think it is appropriate to see if at some point this doesn't begin to have an effect. But I do think it's clear from comments that we've got more to go, and the question is more of timing as opposed to the direction that we are going. So, I would be in favor of the asymmetric language and a borrowing level of \$600 million. And I'd allow the fed funds rate to seek its own market level. But also I think if there are any other indicators, I'd move again on this, and I do think the phone call procedure has worked out very well as a way of dealing with these interim changes. Certainly, I would encourage continuation of that. With regard to the language, I do feel that the pressure now is on the inflationary side and we ought to maintain that focus. So I would leave the language in the paragraph just as it is.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. [I favor] alternative "B" with an asymmetrical directive. I would keep the ordering on the language the same.

However, I think a legitimate point has been raised about M2 and I think we probably ought to take a look at it at the next meeting to see if the case for it has improved. If it has, then I think at that point it would make more sense to put it higher up on the list. But I think it would be premature at this point.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. I, too, was surprised at the asymmetry in Don's Bluebook. And I thought about it a little bit and I figured if he can get rid of "A" this month, he can get rid of "B" next month. I don't have any faith in this trend.

MR. KOHN. It's not a trend!

MR. HOSKINS. I think that kind of reflects my views on what we ought to be doing. I think the surprises, just from six weeks ago, in terms of the staff forecast have been on the upside; we are very strong relative to where we thought we were. Now policy is on the move. I think the markets expect policy to stay on the move. And I think that leads me towards a preference for alternative "C".

I would be much more comfortable if the economy had been growing at 2 percent and we were waiting to see the effect of our policy. I don't think then it would be so urgent to move. Jerry Corrigan made a point earlier that the inflation problem may already be there, in terms of rising. I think he was referring to compensation costs. So it seems to me important to try to keep the thing moving along. I am sensitive to the issue raised that we have made major moves; and certainly people can disagree on the timing. But as I listen to the consensus around here, at least to this point, very few have indicated that we don't need to move. And I guess my point is we've started; we probably should continue. So we could use "C" with asymmetric language going the other way which would require us to kind of gradually pull towards "C" and not go directly to that.

CHAIRMAN GREENSPAN. I'm not sure what you mean by that.

MR. HOSKINS. What I mean is we would choose "C" but we wouldn't move aggressively towards "C" until we got stronger, until we got more data in. In other words, we have a commitment to be at "C" by the time we are at the next meeting--to a gradual tightening.

MR. ANGELL. Okay, so you mean you want to go to \$700 million now and then to \$800 million by the next meeting?

MR. HOSKINS. Right. So let me just finish off by saying I would prefer to move M2 up in the ranking.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. I find myself with Mr. Hoskins. I think we are moving too slowly. We've had in the past month evidence showing that the economy is much stronger than we thought a month ago. We've had this dazzling--more than 800,000--increase in payroll employment in two months. We are seeing the producer price index, excluding food and fuel, break out on the upside of the range that it has been in in recent years. We are seeing a rising trend in labor compensation.

Granted, most of that reflects medical costs and not necessarily all wages, but it still shows the beginning of a rising trend in labor costs in the United States.

I view this present situation as being asymmetric in this sense: that given the powerful [unintelligible] in time, if we were to move to a policy that was too restrictive we would have plenty of time to correct it as we did in 1983, 1984, 1987. But if we make the opposite mistake and have a policy that's too accommodating, we may find ourselves way behind the curve and facing a situation in which we only have two choices--accommodating an accelerating inflation or pushing the economy into recession. And it seems to me that is the real danger of moving too slowly in the face of evidence that the economy is picking up very strongly.

Steve McNees reminds me that the average forecasting error four quarters out is 1-1/2 percentage point, plus or minus. If the error is plus, meaning that our forecast is on the downside, I think four quarters from now we will have only that choice: Do we accommodate a further acceleration of inflation or do we push the economy into recession? And that is the kind of choice we ought to be trying to avoid at all costs. The cost of moving now, running the risk of following too tight a policy now, is a lot less than the cost of being forced into making one of these two bad choices. And the only way you can avoid making one of those two bad choices, as we learned in the 1970s, is by taking a risk early in the game. During the 1970s we were doing exactly what we are doing here. We were moving policy in the right direction, but we were never moving it enough to stay ahead of what was going on in the system. I feel that we are making exactly the same kind of mistakes today. I would buy Hoskins' suggestion of moving initially to \$700 million with the idea of closing up at an \$800 million level. I think that sounds sensible rather than doing it all at once. But I have a very strong feeling that we are moving policy too slowly here.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. Well, I guess I'm a "B", \$600 million today. It's not a new [unintelligible]. First of all, I think the discount rate hike did catch almost everybody in the markets by surprise. Everyone is on vacation, and I don't think that we've had the full impact, particularly in the stock market. Also, we've had several rounds of tightening so far this year and I'm not convinced that all of those have been felt in economic activity yet. Also, I think the foreign exchange markets are very, very important to this process. And I would want to be sure that we didn't get the dollar moving so rapidly north and get it so strong that it would impede our ability to fix our trade imbalances. I think it's important to get that done over the long term.

I do believe money matters and I think the monetary aggregates--particularly M2--have been looking quite good, behaving very well. In connection with that, I would go along with Wayne Angell's idea that we move it up. I'm not sure that today I'm willing to put it in spot number one, but I am willing certainly to move it up [in the directive listing of factors]. Some of the indicators of inflation and inflationary expectations, I think, look better than they did a couple of months ago, particularly looking at prices of

such things as gold, oil, certain commodities. And I realize we have a weak producer price index and some of those, but I think the more sensitive price numbers are not looking necessarily worse. As I said, I would go for a \$600 million borrowing target, and I guess I would prefer a symmetrical directive, but I can certainly live with an asymmetric one.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. Mr. Chairman, I also would go with "B", a \$600 million borrowing assumption, and the asymmetric language because I do think the next move will have to be up. As for the placement of the aggregates, I'm rather ambivalent on that at the present time. Having tightened the position, which would lean towards moving to a little more restriction, I must confess I have a little discomfort. I share many of the concerns that Governor LaWare pointed out. Given the situation that we have in the Southwest, and having I guess the bulk of the thrift problem centered down there as well as other things, I'm a little uncomfortable as rates move up--as credit becomes a little more restrictive--about what the full implications are going to be. I think it's going to make it fairly difficult for us. However, since there can only be one monetary policy and it has to be a national policy, I fully support the direction of what we are doing.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mr. Chairman, I would also prefer your prescription, that is: "B"; \$600 million; asymmetric. It seems clear to me that the next move probably is up, but I have a feeling that we don't really know what the impact of our most recent moves has been. It's time to pause a bit and see what impact that has on the markets. The other issue--if it's true that the next move is up, and I think there's fairly strong agreement around the table--we are kind of in a box as far as I'm concerned, in the sense that you have this spread between the discount rate and the funds rate which many think does make a lot of difference. Over time as that broadens, I don't think we can lose sight of that spread. And as a result, after the move that's being talked about here in the intermeeting period, you may have to consider another discount rate increase. That has a market impact, an announcement impact, that I think has to be thought about long and hard. With respect to the outlook and moving it up, I'd just like to pause and see where we come out.

With regard to the aggregate question, I have great faith in talking about the aggregates as an intermediate target for the long run, but I would prefer not to move it up from where it is now for intermeeting guidance for what policy should be. I think it's about in the right place, about number four. And we ought to keep it there until there's a bit more confidence that it means something for short-term policy guidance.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Like some others, there is at least a crisp debate in my own mind as to whether you could make a case that we should proceed promptly with a further move in the direction of tightening. But I am persuaded that the interest of orderly procedure, if nothing else, suggests that there is something to be

said for what I will call a short period of gestation here. So in that setting, I would support the formulation that you suggested Mr. Chairman.

I don't want to muddy the waters, but I would myself at least prefer the form of asymmetry that eliminates any reference to lesser reserve restraint whatsoever in the directive. I am absolutely convinced at this juncture that we are going to have to firm up policy further and I think the sooner we get on with that test the better. That's because, fundamentally, I agree with much of what Frank Morris says. I am afraid that even as we speak the inflation problem may be on top of us. And I agree with much of what John LaWare said about the financial risks. But the other side of that is that the one thing we know will get us those killer interest rates is a killer inflation rate. So I am very sensitive to those financial risks, but I'm also, as I say, very sympathetic with what Frank said.

CHAIRMAN GREENSPAN. Okay. As I read all comments, it's clear that we have a strong central tendency for \$600 million, asymmetric language, alternative "B". Amongst the members, there's marginal support for moving up the Ms, although little support for number one as yet. So I would suggest that what we do is to move the aggregates above foreign exchange, because it's hard to place that--

MR. JOHNSON. [Unintelligible.]

CHAIRMAN GREENSPAN. That's probably the way to do it.

MR. JOHNSON. Because people believe that's what we are saying.

MR. GUFFEY. Move it where? Where are you going?

MR. ANGELL. He's going to take it above, into number three.

MR. BOEHNE. Promote it to three.

MR. ANGELL. Yes.

CHAIRMAN GREENSPAN. Now, it's conceivable that it may get demoted--

MR. FORRESTAL. That's my problem.

CHAIRMAN GREENSPAN. [Unintelligible.] There's definitely a majority of the members in favor of doing that. I've been tabulating as it goes along. But it is not a strong consensus.

MR. ANGELL. I think your resolution is fair.

CHAIRMAN GREENSPAN. You do?

MR. ANGELL. Yes.

CHAIRMAN GREENSPAN. I knew you might.

MR. GUFFEY. Does that mean that the markets--

VICE CHAIRMAN CORRIGAN. I'll just say for the record--I'm not going to make a fuss about it--I would prefer that it stayed fourth in line, but--

MR. ANGELL. Well, it's close.

CHAIRMAN GREENSPAN. But I had you down.

VICE CHAIRMAN CORRIGAN. You caught it; I figured that.

CHAIRMAN GREENSPAN. I didn't bother asking you.

MR. FORRESTAL. You want another vote?

MR. ANGELL. We already have you down.

CHAIRMAN GREENSPAN. Use the 6 to 10 in here.

MR. KOHN. The monetary aggregate growth, now that it's getting more emphasis--

CHAIRMAN GREENSPAN. 3-1/2 to 5-1/2 is what you've got in the Bluebook for "B".

MR. KOHN. 3-1/2 "to" or 3-1/2 "and"?

CHAIRMAN GREENSPAN. 3-1/2 "and". Why, did I say "to"?

MR. KOHN. Or I didn't hear.

CHAIRMAN GREENSPAN. Okay.

MR. HELLER. You say 3-1/2 and 5-1/2?

CHAIRMAN GREENSPAN. 3-1/2 and 5-1/2.

MR. BERNARD. [The operational paragraph would read as follows:] "In the implementation of policy for the immediate future, the Committee seeks to maintain the existing degree of pressure on reserve positions. Taking account of indications of inflationary pressures, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets, somewhat greater reserve restraint would or slightly lesser reserve restraint might be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth in M2 and M3 over the period from June through September at annual rates of about 3-1/2 and 5-1/2 percent, respectively. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 6 to 10 percent."

CHAIRMAN GREENSPAN. Call a vote.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman Corrigan	Yes
Governor Angell	Yes
President Black	Yes
President Forrestal	Yes
Governor Heller	Yes
President Hoskins	No
Governor Johnson	Yes
Governor LaWare	Yes
President Parry	Yes
Governor Seger	Yes

[Secretary's note: Governor Kelley was absent and did not vote.]

CHAIRMAN GREENSPAN. The only remaining item on the agenda is to note that the next meeting is Tuesday, September 20.

END OF MEETING